# GRANDE PRAIRIE REGIONAL COLLEGE DEPARTMENT OF ARTS, COMMERCE AND EDUCATION INTRODUCTORY ANTHROPOLOGY ANTHROPOLOGY 1010 3(3-0-0), UT, WINTER 2005

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Office Hours: Tuesdays and Thursdays 1300-1430.

Drop-ins welcome.

Delivery method: lecture Pre-requisites: None

Calendar description: The study of mankind is provided through primate and cultural evolution, symbolic systems, cultural theory and culture change.

#### REQUIRED TEXTS

Ember, Carol R., Ember, Melvin and Peregrine, Peter N. (2005). <u>Anthropology</u>. Upper Saddle River, N.J.: Prentice Hall.

Podolefsky, Aaron and Brown, Peter J., Eds. (2003). <u>Applying anthropology: an introductory reader</u>. Boston, Mass.: McGraw-Hill Higher Education.

#### RECOMMENDED READING

ANTHROPOLOGY 1010 SCRAPBOOK—on reserve in the Library.

#### COURSE DESCRIPTION

Anthropology seeks to understand all aspects of what it means to be a human being. In the attempt to define and comprehend the human experience, anthropologists constantly seek differences and similarities: through time, between species, between social groups. This course will look into various branches of anthropology that approach the study of humanity from different perspectives. We will study physical anthropology (including human evolution and primatology), archeology, anthropological linguistics, and socio-cultural anthropology. Our immediate goal is to learn of the theoretical questions posed by anthropologists, the methods by which they seek answers, the insights they can provide and the practical implications of their findings. Our ultimate aim is to learn new ways of examining and analyzing our own experience.

#### REQUIREMENTS AND EVALUATION

There will be two principal kinds of assignments which will determine course grades: Reading Reflections and responses to Take-Home questions posed by the instructor. (For a description of Reading Reflections, see below.) Students will submit at least three of each, at a rate of not more than one a week, by 1 p.m. on Mondays. Each will be worth 12.5% of the final course grade (75% in total). If more than the required number of assignments is submitted, the lowest marks will be dropped from calculation of the course grade. Excessive grammatical or spelling errors may result in the loss of points. One and only one late assignment may be handed in any Monday until Week 14, as long as only one assignment is submitted that week. E-mailed assignments are not accepted.

Twenty-five percent of the course grade will be based on in-class assignments throughout the term. Many opportunities to earn points will be provided, so there will be no make-ups for these. As a bonus "in-class" assignment worth ten points, students may meet with me for an in-depth writing tutorial on one of their assignments (or to discuss any topic related to the course) at any point during the term before the last week of classes. For these in-class assignments ONLY, calculate your mark as a percentage of total marks obtainable.

Alpha grade	4-point equivalent	Percentage	
A+	4.3	80-100	
Α	4.0	76-79	
A-	3.7	73-75	
B+	3.3	70-72	
В	3.0	67-69	
B-	2.7	64-66	
C+	2.3	60-63	
С	2.0	55-59	
C-	1.7	50-54	
D+	1.3	45-49	
D	1.0	40-44	
F	0.0	< 40	

All other assignments are marked on the alpha system.

## FOR STUDENT USE

You may wish to keep track of your grades here.

## READING REFLECTIONS

	Date	Topic		Grade		
1.						
2.						
3.						
4.						
	TAKE-HOME QUESTIONS					
	Date	Topic		Grade		
1.						
2.						
3.						
4.						
IN-CLASS ASSIGNMENTS						
For this portion of this the course ONLY, calculate your mark as a percentage of total marks obtainable.						
	DATE	MARK	DATE	MARK		

#### READING REFLECTIONS

Reading Reflections are to assist students to focus their reading on topics to be covered in class. From the set of readings listed with each topic outline, select concepts or ideas that you have experienced or in which you are interested. Relate and apply these to your life, your community, your experience, your concerns, and/or your understanding. Demonstrate your understanding of the concepts with good examples and with proper use of anthropological terminology. STANDARD CITATION PROCEDURES ARE EXPECTED. (See next page). Reading Reflections should be double-spaced and approximately five pages (1250 words) in length.

#### Some pointers:

- Be sure to make the connection between your own experience or interest and anthropology. Make sure you use (and spell) anthropological concepts and terms correctly.
- Your opinion is not at issue here; your conclusions are. Avoid using "I think" and especially "I believe". Beware of "should"! Your statements (conclusions) should follow logically from the evidence you provide. Seek to understand rather than to judge.
- Define important terms and concepts, referring to readings.
- The purpose of these assignments is not to summarize readings.
- Do not use "you" unless giving advice or instructions, both of which are unlikely!
- Use citations when summarizing the ideas or descriptions of others, not only to accompany verbatim quotes.
- Include a list of references! This is often the only way to ensure you are actually connecting your topic to anthropology; the text will almost certainly form part of it.
- Organization is important! Outline your paper (whether before or after writing it)
  to check that ideas follow logically and that you do not have serious
  contradictions.
- Pay attention to grammar and spelling! (Ask what my pet peeve is.)
- Attention to clarity of expression is expected.
- It is quite permissible (even encouraged!) to use your own experience as evidence (which is different from opinion), and to use "I" and "my".
- Number your pages!
- Pay attention to notes and comments on your work. Their purpose is to help you improve your writing in form, expression and content--and also allow the instructor to communicate with you! If you need clarification, or can't read my writing--

Above all, if in doubt, talk to me!

#### **GUIDE TO REFERENCES**

If you use a direct quote (or a diagram, or statistics) from an author, your source must be acknowledged. The quotation must be exact! For example:

"There is a basic contradiction in the structure of girls' social relationships. Friends are supposed to be equal and everyone is supposed to get along, but in fact they don't always. Conflict must be resolved, but a girl cannot assert social power or superiority as an individual to resolve it" (Maltz & Borker, 2003, pp. 164-165).

If you paraphrase an author or use ideas which are not your own, your source must still be acknowledged. Include the name of the author, publication date, and (usually) page number. For example:

Poverty and ignorance are not necessarily the best explanation for why people avoid drinking milk. Lactase production is not common among adults around the world (Ember, Ember & Peregrine, 2005, p. 2).

In referring to an author whose work is cited in a text you are using, refer to the latter, not to the original source. For example:

Easter Island was apparently covered by subtropical forest for thousands of years before it lost its trees (Flenley & King as paraphrased in Diamond, 2003, p. 95).

References to information downloaded from the Internet are similar to those used for print materials. For example,

In seventeenth-century Turkish cafes, coffee was accompanied by smoking tobacco from elaborate *narghile* (Gercek, 1986).

#### REFERENCES

- Barnes, N., et al. (coproducers), and Weitz, P. and Weitz, C. (Directors) (2002). About a boy. Universal Pictures.
- Diamond, J. (2003) . Easter's end. In Aaron Podolefsky and Peter J. Brown (Eds.), *Applying anthropology: an introductory reader* (pp. 92-97). Boston, Mass.: McGraw-Hill Higher Education.
- Ember, C.R., Ember, M. & Peregrine, P.N. (2005). *Anthropology*. Upper Saddle River, N.J.: Prentice Hall.
- Gerkec, G. (1986). Narghiles. *Antikas, the Turkish journal of collectable art*, 11. Retrieved December 22, 2002 from http://hookahkings.com/articles/article4.htm
- Maltz, D.N. & Borker, R.A. (2003). A cultural approach to male-female miscommunication. In Aaron Podolefsky & Peter J. Brown (Eds.), *Applying anthropology: an introductory reader* (pp. 160-171). Boston, Mass.: McGraw-Hill Higher Education.
- Moyers, B. (Executive Editor) & Tatge, C. (Producer) (1988). The first storytellers, Program Three of *The power of myth*. New York, NY: Mystic Fire Video, Inc.
- Theroux, P. (2002, December). Hawai'i: Preserving the breath. <u>National Geographic 202</u> (6), 2-41.

These go in alphabetical order according to the (first) author's surname. Anthology articles (and journal articles) are attributed to the author/s of the article, not the editors of the volume. The year of publication is the year of the anthology, not the original year of publication of the article. Underline titles of books or journals. Consult an APA style guide (some of which are available on-line), if you have doubts.

# GRANDE PRAIRIE REGIONAL COLLEGE DEPARTMENT OF ARTS, COMMERCE AND EDUCATION ANTHROPOLOGY 1010: INTRODUCTORY ANTHROPOLOGY BRIEF LECTURE OUTLINES, READINGS AND WEEKLY QUESTIONS

Week 1 ends on the second Friday of the term; Week 14 ends on the Friday following the last week of classes. You are advised to complete readings before a topic is covered in class and before attempting Take-Home questions or Reading Reflections. Class discussions are intended to clarify and supplement readings, not summarize them. In-class assignments (often quizzes) and essay questions are based on the readings and class discussions covered that week. Reread instructions for Reading Reflections and Reference Guidelines each time you do an assignment.

Answers to essay questions (the number corresponds to the week) or Reading Reflections (each worth 12.5% of the final course mark) must be submitted by 1 p.m. Mondays, at a rate of only one per week. (E.g. Week 1 assignments must be submitted by 1 p.m. on Monday of Week 2.) At least three of each must be submitted in total. You should have completed at least two assignments by Week 7. Pay close attention to the topic of the week and to due dates for questions! These may change during the term. Both types of assignments are likely to be three to five pages in length, or up to 1250 words. Double-space all written work. The topic for Week 8 (which may be marked as a Question or Reading Reflection) must be done; it is not optional. (See Week 6 as well.) One and only one late assignment may be handed in any Monday until Week 14, as long as only one assignment is submitted that week. E-mailed assignments are not accepted.

There will be approximately ten in-class assignments during the term, held at the instructor's discretion. There are no make-ups for these.

#### Readings are in

EE&P = Ember, Carol R., Ember, Melvin and Peregrine, Peter N. (2005). <u>Anthropology</u>. Upper Saddle River, N.J.: Prentice Hall. and/or

AA = Podolefsky, Aaron and Brown, Peter J., Eds. (2003). <u>Applying anthropology: an introductory reader</u>. Boston, Mass.: McGraw-Hill Higher Education.

Except for those marked "Related", all of the readings are required. Any assigned reading may be the topic of Reading Reflections during the appropriate week. Also see the AN1010 SCRAPBOOK, on reserve in the Library.

#### Week 1 INTRODUCTION TO ANTHROPOLOGY

### Anthropology as a social science

subdisciplines of anthropology: biological, linguistic, archeological, socio-cultural themes of description, comparison, diversity, change through time

#### READINGS

EE&P What is anthropology? (1)

AA Aaron Podolefsky and Peter Brown, Introduction

#### QUESTION 1

Briefly describe the four diverse subfields of anthropology and provide good examples of their subject matter. How does the concept of HOLISM help to link their subject areas into one discipline? (In other words, how do the four subject areas work together?)

#### WEEK 2 CULTURE

Culture:

". . . is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society." (Edward B. Tylor, 1871, PRIMITIVE CULTURE.

London: J.M. Murray. p.1)

"everything that people have, think and do as members of a society." (Gary Ferraro, 1998, CULTURAL ANTHROPOLOGY: AN APPLIED

PERSPECTIVE. Belmont, CA: West/Wadsworth. p.18)

Human beings born into culture; can't survive without it material and non-material

Culture both possible and necessary w/ biological characteristics brain, hands, bipedalism, physical vulnerability lack of specialization

Must transform environment - and can

adaptation through culture; environmental effects on culture

Must live together in organized groups to develop and share culture--society organization requires culture symbols for communicating culture culture is learned - enculturation

Knowledge of past, projection of future, near, far place in space and time defined by culture

Cultures are programs for governing behavior maintained and modified through practice through experience and creativity dynamic

Culture as a way of life

economic organization, social structure, political order, ideological system meaningfully understood in relation to one another: holistic view hence cultural relativism avoid ethnocentrism

Kinship terminology

#### READINGS

EE&P The concept of culture (13)

AA Aaron Podolefsky and Peter Brown, Part III: Cultural Anthropology (Introduction)

Horace Miner, Body ritual among the Nacirema

Margaret Mead, Letter from Peri-Manus II

Jill Dubisch, You are what you eat.

Eugene Cooper, Chinese table manners

Bruce Bower, Slumber's unexplored landscape

Claire E. Sterk, Tricking and tripping: fieldwork on prostitution in the era of AIDS (Related)

Jennifer J. Laabs, Corporate anthropologists (Related)

#### **QUESTION 2**

In order to explore the concept of culture and how it functions to organize our thinking and our behavior, consider three to five rooms in your house.

- a) What is it named? (What is not named?)
- b) Who uses it? (Who does not?)
- c) For what purposes? When?

Write a good conclusion on what this tells us about culture.

#### Week 3 COMMUNICATION AND LANGUAGE

Importance of study of linguistics
different culture, often different language
culture learned through language
helps to understand human mind
learn of past of human groups
non-verbal communication too
talk / communicate / write

#### Characteristics of human speech

vocal-auditory channel; heard and fades arbitrary--why "oink"? open system--innovations, combinations displacement traditional--taught and learned symbolic

#### Types of linguistic study

structural or descriptive – rules of sound, order, meaning ethnolinguistics – language and perception, language and culture historical linguistics – origins and relationships between languages and dialects and language and dialect communities sociolinguistics – language and social differences; ethnography of speaking paralinguistics – behaviors supplementary to spoken language ethnosemantics – subculture vocabulary

#### Language is political

unites and separates facilitates and inhibits communication can mark conflict, dominant/subordinate

#### READINGS

EE&P Communication and language (15)

AA Laura Bohannon, Shakespeare in the bush
Daniel N. Maltz and Ruth A. Borker, A cultural approach to male-female communication
Keith Basso, To give up on words...

#### QUESTION 3

Describe the following fields of study. Provide an example of the kind of research which would be of interest to scholars in each field.

- a) a descriptive linguist
- b) a comparative (or historical) linguist
- c) a sociolinguist
- d) a paralinguist (student of non-verbal communication)

Which of these approaches to the study of communication is a layperson (non-academic) most likely to use? Why?

#### Week 4-5 ECONOMIC SYSTEMS

#### Typology of adaptive strategies:

foraging, horticulture, pastoralism, agriculture, industrialism/world system

# FACTORS IMPORTANT TO UNDERSTANDING OF CULTURE, SOCIETY, ECONOMIC AND POLITICAL SYSTEMS

#### WHAT ARE THE RESOURCES? Resources are not products

ecological niche: resources in the environment used by society environment gives possibilities and imposes limitations different cultures use an environment differently human activities also affect the environment

Who has access to / control over them?

Who has access to / control over them? wealthy vs. poor

#### WHAT IS THE TECHNOLOGY (tools and knowledge)?

portable, made by all from local materials fixed, imported, made by specialists
Who has access to / control over it?

#### HOW IS WORK ALLOCATED AND ORGANIZED?

Division of labor: age, sex, race, inheritance, by kin specialization: part or full-time Who organizes / has the right to demand or command labor?

#### WHAT IS PRODUCED, IN WHAT QUANTITIES, FOR WHAT PURPOSE?

subsistence, trade or tribute surplus Who makes production decisions?

#### HOW ARE PRODUCTS DISTRIBUTED?

governs consumption

reciprocity: exchange between equals

generalized: equitable sharing, don't await or count return;

balanced: await return, but not immediate

barter: usually immediate; different goods and services

aifts

redistribution: tribute goes up, redistributed down

market: profit, supply and demand, money Who controls products and distribution?

Combines elements of resources, work, technology, social relationships

Through work to obtain food, shelter, clothing, etc.

we perpetuate (reproduce) culture and society

REVIEW COURSE OUTLINE

#### READINGS

EE&P Getting food (16)

Economic systems (17)

AA Jared Diamond, The worst mistake

Richard Borshay Lee, Eating Christmas in the Kalahari

Lee Cronk, Strings attached

Noreene Janus, Advertising and global culture

John H. Bodley, The price of progress

Philippe Bourgois, Crack in Spanish Harlem (Related)

Alan H. Goodman and George J. Armelagos, Disease and death at Dr. Dickson's Mounds (Related)

#### QUESTION 4

Which adaptive strategy is most likely to be most damaged by, and which is most likely to benefit from each of the following events or processes? Justify your choices.

- a) damming of river systems
- b) fencing grasslands
- c) deforestation
- d) power outages
- e) collapse of the monetary system.

#### Week 5-6 POLITICAL STRUCTURE

Typology of cultures, based on political system: band, village/tribe, chiefdom, state, world system

SIGNIFICANT VARIABLES:

Subsistence system

Region occupied: area and homo / heterogeneity

Population of political unit

Control over

access to resources and technology, production and distribution

trade, weapons

Concentration of power, stratification

Formality of leadership

Control over people - social control

Conflict resolution—from joking duels to arbitration to feud

External relations

Reliance on kinship, age, gender / impersonal relations--nationality

Forms of ideological control

Foraging bands loosely structured by kinship, etc.

headman lacks power resources, products shared

More structure among villages of tropical forest farmers

"big man", headman not authority

uses oratory, charisma, example to get help

must be generous, redistribute what all can produce

can be removed, lose position

does not own means of production—land

Tribal organization can be of autonomous villages or bands

usually in response to outside threat

requires multilocal linkages

kinship, age grades, associations

Chiefdoms in areas of more ecological diversity

trade between uniform communities

"chief" is a position occupied by individuals

redistributes goods of different areas and groups of people

States redistribute too, but syphons off much for elite socio-economic stratification; power at the top authority legitimized, institutionalized difference in power allows--results from--exploitation

State must

control population: know numbers, determine citizenship, status regulate behavior through law and order protect its sovereignty tax and conscript people for revenue and defense must keep prevailing structure and property relations class and caste systems because of inequality, must also use ideological control

World system reproduces this at global scale States started in Europe

went overseas for raw materials, spices and gold local inhabitants forced to produce

when necessary, laborers transported--slavery conquest of "empty" areas, and of indigenous states movement of millions of poor and landless from Europe with independence, new states created w/ arbitrary boundaries not in response to local needs

State vs. nation
Integrate the world, each region less self-sufficient
some more powerful
profit from, live well because of the poverty of the rest.

Racism a consequence of global inequality Democracy and peace?

#### READINGS

EE&P Social stratification: class, ethnicity, and racism (18)
Political life: social order and disorder (23)
AA Aaron Podolefsky, Contemporary warfare in the New Guinea Highlands

#### **QUESTION 5**

Describe two of the five principle types of political organization (bands, cultivating villages/tribes, chiefdoms, pre-industrial states, world system) in terms of

control over resources, especially land control over products and their distribution concentration of wealth and power (i.e. control over people).

#### **QUESTION 6**

Ember, Ember and Peregrine (2005, pp. 417-423) discuss various means of "peaceful" conflict resolution. All can be said to be used in contemporary Canadian society. Discuss and provide examples.

[SEE WEEK 8]

#### Week 7 MARRIAGE, THE FAMILY AND KINSHIP

All societies have to solve certain problems, fulfill certain needs responsibility for children: supporting them, training them economic cooperation: for support of individuals, especially children; for continuity control sexual relations establish relationships with other social groups establish property relations

These are often achieved through some form of marriage and family

Family: nuclear ideal of foragers and industry:

two parents and dependent children
for most societies, extended family
families: people related by ties of blood and/or marriage, who live together
cooperating subsistence or economic unit
share work, resources, care of children
division of labor between men and women, old and young
old teach young, young will support old

Marriage creates relationships between groups hence levirate, sororate political alliance, social exchange--kinship property relationships

bride price (wealth), progeny price, bride service
compensation for women's production and reproduction
dowry, woman's property or compensation for taking a woman
circulation of marriage wealth
polygyny, polyandry, polygamy, monogamy

POSTMARITAL RESIDENCE: This is closely related to access to resources and to descent. It determines who leaves the domestic group, their family of orientation, and who stays; who will be "home" after marriage. Ideal types: Unilocal

Patrilocal, virilocal

Matrilocal, uxorilocal (avunculocal: live with MB)

Bilocal: some time in each; Ambilocal: some people in each,

Neolocal

Multilocal; single parent? joint custody?

DESCENT is the calculation of who is descended from whom, may determine access to rank, property, and group membership Bilateral: through both parents equally, including everyone individual's relatives are kindred; only siblings have same kindred

Unilineal:

Patrilineal, Matrilineal go w/ societies w/ lineages
belong to same group as father OR mother
Ambilineal: through either parent; zigzagging.
lineage: descendants of common ancestor
clan: several lineages, descendants of a common (mythical) ancestor
lineage and clan exogamous; continue despite death of members
other relatives recognized but don't belong to same lineage

History of marriage and the family

industrial revolution forced urbanization,

individual wage employment, breakup of extended family nuclear family needed, reinforced

largest unit that could be mobile for work

woman isolated in nuclear family

defined out of wage employment

defined as being worth less; underpaid, dependent

recent change w/ women in the workforce; independent

but largely responsible for children

increasing divorce and single-parent families

individual independence; LOVE

reproduction gets in the way of production

but production needed for reproduction

conflict between career and family for men and women

who benefits from divorce?

#### READINGS

EE&P Marriage and the family (20)

Marital residence and kinship (21) except "Kinship terminology", pp.385-388

AA Melvyn C. Goldstein, When brothers share a wife

Philip L. Kilbride, African polygyny: family values and contemporary changes

Sarah Blaffer Hrdy, Mothers and others

#### **QUESTION 7**

Using anthropological terminology, with reference to North American culture and society, discuss

- a) the ideal forms of marriage, post-marital residence and family ("ideal culture"), and
- b) actual practices ("real culture").
- c) Explain how ideal and actual forms reflect our socio-economic system.

## QUESTION OR READING REFLECTION 8 INTERVIEW WITH ENGLISH LANGUAGE STUDENT

Your task this week is to interview an English Language student on any anthropological topic you like. (The instructor will arrange interviews.) You must understand the anthropological perspective on this subject and, in your interview, seek information and perspectives that will allow you to make a comparison between his or her culture and society and your own. You may choose to deal with more than one topic. The topics you wish to discuss must be submitted in Week 6.

Your write-up of this interview should make clear that you are dealing with topics of interest to anthropology, make social and cultural comparisons, and include a description of the interview process. Use anthropological terminology where appropriate.

This will also be graded as an in-class assignment worth 10 points. 5 will be awarded for submitting interview topics in Week 6, and 5 for attending class punctually on the day interviews take place.

#### WEEK 9 GENDER, SEXUALITY AND REPRODUCTION

All societies have methods of controlling reproduction - increasing or decreasing all are rational few see long-term implications

Who determines / decides about pregnancy and giving birth? see social patterns contraceptives: prescribed and proscribed

Under what conditions is the decision to have many children? Few? relation between production and reproduction

What are the strategies to implement reproduction plans?

Study of family essential to understanding gender relations production and reproduction in foraging societies, status of women high horticultural societies--frequency of warfare crucial pastoral and agricultural societies strict inheritance rules of livestock and/or land men work on these; men inherit class differences; reproductive freedom ends; European colonialism expanded European gender relations along w/ European economic, political, social system gender relations in our society

men expected to be providers

men get economic and hence political influence women expected to care for family

women w/ children out of economic and political influence in most (all?) societies,

women have ultimate responsibility for day - to - day care and sustenance food, childcare, clothing, shelter men have responsibility for emergencies (politics, long-distance trade, war)

Who has power?

#### READINGS

EE&P Sex, gender and culture (19)

AA Heather Pringle, New women of the Ice Age
Meredith F. Small, Our babies, ourselves
John van Willigen and V.C. Channa, Law, custom, and crimes
against women
Ernestine Friedl, Society and sex roles
Corinne A. Kratz, Circumcision, pluralism, and dilemmas of cultural
relativism

#### **QUESTION 9**

Discuss the relationship between gender relations, economic and political organization in two of the following:

foraging bands tribal villages chiefdoms agricultural states industrial and post-industrial states

# Week 10 PHYSICAL ANTHROPOLOGY: GENETICS AND HUMAN VARIATION Includes study of

our physical makeup and characteristics

possibilities and limitations for our behavior

interacting with environment:

nutrition, activities, disease

genetics: heredity from ancestors through parents

human variation: differences and similarities between populations

evolution: reconstructing ancient life forms and life ways

primatology and ethology: similarities and differences with other animals

Genetics underlies all; evolution through inherited genes

human cells w/ 46 chromosomes in 23 pairs; variability

one of each pair from each parent

chromosome pairs split up to form sex cells (sperm and ova)

matter of chance which 23 from one parent will join

with which 23 from the other

chromosomes carry genes (pair is allele)

matter of chance which genes will be inherited

from which parent

genes inherited: genotype

homozygous: identical genes governing a trait inherited

from both parents

heterozygous: different genes governing a trait inherited

some genes appear dominant, some recessive

e.g. Yellow/green, Round/wrinkled peas

independent assortment, e.g. mother's nose and father's eyes

polygenic: traits governed by more than one gene, e.g. height

particulate inheritance (not blending)

genotype interacts with environment to form phenotype

appearance, physical characteristics; adaptation and adjustments

Biological evolution: takes place when population gene frequency is altered

genetic drift: proportion of genes in each generation

can differ by chance, e.g. small, isolated population;

migration of small group

gene flow: interbreeding among populations of a species; miscegenation

e.g. Africans w/ Europeans w/ Native Americans

mutation: variation in DNA code of genes, change in structure

or number of chromosomes; source of variation

can be due to physical, chemical factors, radiation

natural selection: most powerful.

environment selects for variable fitness of genes and traits

fitness: reproductive success, number of progeny—humans?

caution in application to short-term human behavior

human cultural and social adaptation

Populations with different gene frequencies

due to reproductive isolation and natural selection shows history of and relationships between populations see adaptation to different environments over long period

study of human variation and ethnocentrism

sickle-cell anemia

homozygous: debilitating if not fatal heterozygous: resistance to malaria skin color: dark provides protection from sun

light skin allows in--Vitamin D synthesis

lactase insufficiency: absent where dairy products significant

body shape: large, massive--cold; thin, long--hot

diabetes, Tay Sachs

"Race": group w/ members socially defined as sharing physical characteristics social and cultural phenomena require social and cultural explanations not biological

#### READINGS

EE&P Genetics and evolution (3)

Human variation (12)

Social stratification (18) pp. 324-327

AA Aaron Podolefsky and Peter Brown, Part I: Biological Anthropology (Introduction)

Barry Bogin, The tall and the short of it

Jared Diamond, Race without color

Peggy McIntosh, White privilege

American Anthropological Association, Draft official statement of "race" (Related)

Deborah Friedman Lustig, Of Kwanzaa, Cinco de Mayo, and whispering: the need for intercultural education (Related)

#### **QUESTION 10**

Explain three arguments which make it difficult to establish a racial classification of human beings using biological characteristics. Given these difficulties, why do we continue to speak of "African-Americans", "First Nations", "Euro-Canadians", "Asians", etc.?

#### Week 11 PRIMATOLOGY AND HUMAN NATURE

Primatology studied to distinguish humans from and incorporate us into the animal world compare anatomy compare social life compare intellect

#### Evolutionary tendencies among primates

extremities: mobile digits, opposable big thumbs and toes precision grip to pinch and grasp, tactile pads on digits,

fingers replace nose for feeling

nails replace claws, climb by grasping

vision: eyes to front, overlapping vision field for depth,

color vision, vision replaces smell

posture: upright, changes in vertebral column, chest, skeleton

brain: developed, more variation and complex behavior

infancy: prolonged gestation and dependency

teeth: fewer, changed shape,

change in econiche, social behavior, locomotion, etc.

#### Primatologists have helped learn

differences in human/non-human behavior quantity, degree not quality

kinship, dominance, tool-making, language abilities social relationships, aggression, sharing, parenting emotions, gender

Sociobiology: search for biological bases of behavior avoid determinism, comparing the incomparable

seek human universals (incest avoidance, facial expressions) facilitate cross-cultural communication, empathy

without losing sight of diversity

#### **READINGS**

EE&P The living primates (4)

Primate evolution (Related) (5)

AA Barbara Smuts, What are friends for?

Meredith Small, What's love got to do with it?

## QUESTION 11

Anthropologists study living non-human primates in order to improve their understanding of human physical, intellectual and social characteristics or behaviors. Describe important similarities and differences in each of these three areas.

#### HUMAN BEINGS IN THE ANIMAL WORLD

Kingdom: Animalia

traits: mobile, multicelled, obtain energy from eating other organisms

not: plants, bacteria, one-celled fungi

split: Paleozoic, 570 million years before the present (myr B.P.)

Phylum: Chordata

traits: notochord, gives internal structure to body, gill pouches, hollow nerve

chord ending in brain

not: sponges, jellyfish, flatworms, mollusks, insects, crustaceans, spiders

split: Paleozoic, 400 myr B.P.

Subphylum: Vertebrata

traits: vertebrae surround or replace notochord, brain encased in skull

split: Paleozoic, 400 myr B.P.

Superclass: Tetrapoda

traits: four-footed

not: fish

split: Paleozoic, 400 myr B.P.

Class: Mammalia

traits: mammaries, constant temperature, hair, teeth (incisor, canine, molar)

not: amphibians and reptiles, birds

split: Mesozoic, 225 myr B.P.

Subclass: Theria

traits: do not lay eggs not: duckbill, anteater

split: Cretaceous, 100 myr B.P.

Infraclass: Eutheria

traits: placenta to nourish young within mother

not: marsupials

split: Cretaceous, 75 myr B.P.

Order: Primates

traits: extremities: prehensile hands and feet, opposable thumb and big toe,

flexible, rotating arms; vision: large eyes, stereoscopic color vision, poor smell; complex social behavior: few offspring/birth--two mammary glands, prolonged pregnancy, prolonged infant dependence on mother, group life

to support mother/child, large brain to process social and physical

information, communication

not: dog, cat, etc.

split: Paleocene, 60 myr B.P.

Suborder: Anthropoidea (monkeys, apes, man)

traits: large, round skull; flat face; dry nose; mobile, dry, hairy upper lip

not: Prosimii (lorises, lemurs) with rhinarium (moist strip joining lip and nose),

2.1.3.3. dental formula

split: Eocene, 40 myr B.P.

Infraorder: Catarrhini (Old World monkeys, apes, man)

traits: sharp-nosed, 2.1.2.3.

not: Platyrrhini (New World monkeys) 2.1.3.2., all arboreal, often prehensile

tails, mobile spine

Superfamily: Hominoidea: man and apes

traits: relatively large, seldom on all fours, brachiate, knuckle-walk, bipedal,

intelligent, no tails; terrestrial

not: Cercopithecoidea (Old World Monkeys), ischial callosity, terrestrial and

arboreal (baboons, macaques)

split: Oligocene, 30 myr B.P.

Family: Hominidae

traits: arms and hands carry heavy objects; dextrous; strong, long thumb

bipedal: foot with arch, parallel toes, long legs, gluteal muscles; pelvic girdle flat, basin-like, weight-bearing; vertebral column curved, long neck, head centered, foramen magnum (hole for vertebral column)

directly under skull--upright posture; rest of skeleton--pelvis, legs-shows bipedalism; skull sutures form after birth--immature birth;

small birth canal,

head: smooth, round--more brain room, small jaw, directly under eyes;

parabolic dental arcade, high, narrow molars, small canines

females sexually receptive throughout cycle

not: Pongidae: great apes, grasping feet--orangutans, gorillas, chimpanzees

Hylobatidae: lesser apes--siamang, gibbon

dryopiths, ramapiths, Gigantopithecus

split: Pliocene, 5 myr B.P.

Genus: Homo

traits: larger brain; hunters; relatively smaller back teeth, relatively larger front

teeth as grinding tools take the place of teeth, no estrus

not: Australopithecus

graciles 4 myr B.P.: sharp, large canines, large molars for

grinding seeds and fibrous food, large cheekbones to hold chewing muscles, small brain case; sexual dimorphism;

prognathism

robust 2.6 myr B.P.: bigger, larger skulls, bigger back teeth,

thicker faces, sagittal crest

split: Pleistocene, 2 myr B.P.

Species: sapiens sapiens (100-200,000 B.P., Upper Paleolithic) (e.g. Cro-Magnon)

traits: blade tools, more standardized types of tools, slighter bodies as tools took

over work, less sexual dimorphism, more cultural diversity,

not: habilis (2 myr B.P.) Olduvai industry--pebble tools,

erectus (1.5 myr B.P.) Lower Paleolithic, fire, Acheulian tool industry-worked stone core, cooperative hunters and gatherers, large brain;

low, sloping forehead w/ brow ridge; language possible;

sapiens archaic (300,000 B.P.)

sapiens? neandertal; (130,000 B.P.) robust, adapted to cold weather, Middle Paleolithic, Mousterian tool industry--flaked stone, broad face, large front teeth, heavy brow ridge, low slanting forehead,

sexual dimorphism

#### Week 12 HUMAN EVOLUTION

Basic human traits, evolutionary trends

Australopithecus through Homo

large and reorganized brain

culture, manipulation of environment and each other

brain case enlarges as bone and teeth shrink

more digestible foods, tools, fire

seen in cranium

bipedalism: mobility, free hands,

seen in post-cranial skeleton: small and light to heavy to medium

dentition: use in eating, as a tool

seen in dental apparatus

manufacture and use of tools, increasing complexity

seen in tool remains

tool types come to be characteristics of evolution stage

all these are preserved in fossil record

but vocal apparatus is not; don't know when speech arose

non-stone tools are not

#### Basic process:

primates moved to ground from trees, became savanna foragers

large canines for defense and group control

molars enlarged to chew food and sand

bipedalism--mobility, work and carry with hands

increases immaturity at birth

increases need for group to protect and rear

increases sharing and cooperation

hunting requires sharing and cooperation

(visibility of hunting technology)

larger social group, also gender division of labor

w/ tools and weapons, canines shrink, face shrinks

leaves room for brain

w/ grinding tools, molars shrink

with less physical defense, more cultural defense

for culture, more language needed

w/ culture, longer infant dependency

enculturation

evidence: fossil and bone skeletal remains, tools, animal remains

#### HOMINIDS AND LITHICS

Genus species

Australopithecus—"southern ape"; bipedal

gracile—A. anamensis (4.2myBP), A. afarensis (4-3myBP),

A. africanus (3myBP)

robust— A aethiopicus (2.7myBP), A. robustus (2.5myBP), A. boisei

Homo

H. habilis (2.3myBP)

lithic tools: Oldowan—core and flakes

sharp edges, few blows; choppers

H. erectus (1.8myBP)

lithic tools: Acheulian—large, standardized tools

many flakes (Lower Paleolithic)

H. neandertal (200tyBP)

lithic tools: Mousterian/post Acheulian—more small flake tools, scrapers retouched flakes, prepared cores (Middle Paleolithic)

H. sapiens Cro-Magnon (35tyBP)

H. sapiens sapiens

lithic tools: blades, microliths, (Upper Paleolithic) (Neolithic – 10tyBP)

#### **READINGS**

EE&P The first hominids (6)

The origins of culture and the emergence of Homo (7)

The emergence of Homo sapiens (8)

The upper Paleolithic world (9)

AA Robert Root-Bernstein and Donald L. McEachron, Teaching theories: the evolution-creation controversy

Elizabeth D. Whitaker, Ancient bodies, modern customs, and our health

S. Boyd Eaton and Melvin Konner, Ancient genes and modern health

#### **QUESTION 12**

How are bipedalism, brain size and infant dependency interconnected in hominid evolution? How are they related to socio-cultural evolution?

IN-CLASS ASSIGNMENT: SKULLS

Gorilla gorilla, Australopithecus africanus, Australopithecus boisei, Homo erectus, Homo neandertal, Homo sapiens sapiens

#### Describe in relative terms:

```
skull
size, weight
brow ridges
sagittal crest
forehead—sloped or vertical
cranial capacity
sutures
dentition
jaw—prognathism
chin—prominent or receding
dental arcade—shape
canines—prominence
size of front vs. back teeth
posture—bipedalism
location of foramen magnum
```

Use scientific terminology in naming species. You may use popular terms <u>in addition</u>, but not <u>instead</u>.

#### Week 13 ARCHAEOLOGY

Subsistence system and material remains

Archaeologists, looters, collectors, museums and ethics To whom does the past belong?

Archeological site is perceived location of human activity artifacts, cultural objects made by people ecofacts, not made by people: pollen grains, food, bones, features: not movable from site excavation = destruction CONTEXT

#### Strategies of anthropology

ideational approach: how people understand the world, structure it, think about it adaptive approach: adaptation to social and economic environment most arky here

Trends in scientific archeology
hobby of the rich to C20, search for treasures
Contemporary archaeology w/ 3 hierarchical goals
each includes previous and is ongoing
construct cultural chronologies
reconstruct past lifeways
understand cultural processes

#### Construct cultural chronologies

"classificatory period" to World War I

description, typologies, classifications, chronologies stratification - law of superposition: older deposits under young careful excavation by grids, by levels, visible or measured quantification of types of artifacts found in each proportions change through time: battleship curves artifact type coincides w/ culture type

seriation: place stylistic periods in time

component: culturally homogeneous stratigraphic unit in a site phase: similar components at several sites in a region gives relative dating computerization, statistics

absolute dating ideal, not always possible dendochronology, obsidian hydration, amino-acid racemization on bones, potassium-argon dating in rocks, radiocarbon dating electron spin resonance, thermoluminescence

Reconstruct lifeways on basis of sequence of cultures, as seen in artifact types adaptation to social and natural environment horizontal perspective, region rather than site, ecofacts subsistence patterns: faunal remains, plant remains much of this missed when artifacts were sole interest lacked technology for analysis settlement patterns: one site not enough seasonal variation, sites for different purposes population density, distribution, specialization social organization: context of artifact essential, showing use and meaning domestic group, economic specialization, social status, religious organization: symbols, important sites, ceremonial sites astroarchaeology

Cultural processes, e.g. emergence of agriculture, settlement, city rise and fall of states, migrations
1960s on, "revolution", new archaeology search to make arky relevant cultural evolution, human ecology, social organization new methods: aerial surveys, pixel archeology emphasis on cultural ecology relationship to environment—effects of environment on people e.g. earthquakes, climate change relationship to environment—effects of people on environment e.g. deforestation, desertification, soil depletion political relations

warfare, disease, social inequality, disease, tribute demands, trade

#### READINGS

EE&P How we discover the past (2)

Origins of food production and settled life (10)

Origins of cities and states (11)

AA Aaron Podolefsky and Peter Brown, Part II: Archaeology (Introduction)

Baird Straughan, The secrets of ancient Tiwanaku

Payson D. Sheets, Dawn of a new Stone Age in eye surgery

Robson Bonnichsen and Alan L. Schneider, Battle of the bones

Gail G. Harrison, William L. Rathje & Wilson W. Hughes, Food waste behavior

#### **QUESTION 13**

In archeological research, what kinds of evidence can provide information about a people's

adaptive strategy / subsistence system state of health trade patterns social hierarchies belief systems?

Answer this question using specific reference to assigned readings.

#### IN-CLASS ASSIGNMENT: ARCHEOLOGICAL MATERIALS

Comment on the contents of each set of archeological artifacts, considering materials, construction, decoration and use.

- 1. Blue box
- 2. Red bag (archeology students' lab)
- 3. Lithics with shells (Patagonia)
- 4. Materials from Carriacou (Caribbean)
- 5. Sarmaga collection (Bezanson)
- 6. Posters
- 7. Trudel cache (display case opposite J102)
- 8. Other