

# Introduction to Biological Anthropology

Anthropology 1100, Fall 2008  
University of Wyoming

Lecture: Classroom Bld. 314; Labs: Anthropology Class Lab, Anthropology Bld. Rm. 140  
Lecture MWF 10 – 10:50; Labs: M (sec. 10) 8 – 9:50, T (sec. 11) 10:10 – 12, Th (sec. 12) 1:20 – 3:10

Course Instructor: Dr. Jim Ahern

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Office Hours: MWF 11:10 a.m. - 12 p.m. *and by appointment*

Lab Instructor: Mr. Geoff Smith

Office: Anthropology Building Rm 350

Phone: 766-5136 (Note: this is the main anthropology office number. Email is preferred.)

Email: gsmith25@uwyo.edu

Office Hours: T 1 - 2, Th 11 - 12 *and by appointment*

## **Course Description:**

Covers basic concepts relating to the origin, evolution and biological nature of the human species.

In Anthropology 1100 we will explore the fundamental principles of the evolution and biological adaptation of our own species, *Homo sapiens*. Our search will take us in a number of directions by way of evolutionary theory: through genetics and the diversity of modern human populations, through a study of behaviors and physical traits we share with other primates, to the fossil record of human physical evolution. Finally, we will look at the dramatic biocultural changes that have happened to humans during the last 10,000 years, and how they have contributed to the human condition, today.

## **Course Goals:**

- **To provide a basic but broad understanding of human biology and evolution**

Attainment: Lectures, labs, readings, small-group discussions

Expected Outcome: Student appreciation of human biological diversity and the process, evolution, which produced this variation. Student understanding of human biological adaptation and how it has changed over time. Student understanding of the complexity of the human fossil record as well as the basics of the mammalian and primate fossil records.

Assessment: exams, in-class projects, individual reaction papers, and lab assignments.

- **To introduce the scientific method and to explore science's role in society**

Attainment: Labs, lectures, readings, small group discussions, reaction paper research, in-class projects.

Expected Outcome: Reinforcement and development of students' ability to critically evaluate. Student appreciation of both the strengths and limits of the scientific method. Student understanding of the scientific method, including hypothesis formation and testing. Student appreciation of science's role in society and how society influences science.

Assessment: lab assignments, in-class projects, individual reaction papers, exams.

- **To introduce the anthropological perspective**

Attainment: Lectures, in-class projects, readings, and labs.

Expected Outcome: Student understanding of the field of anthropology and student appreciation of how biology, language, and culture interact to form human diversity and evolution. Student ability to explain the anthropological perspective orally and in written form.

Assessment: exams, in-class projects, and lab assignments.

- **To introduce biological science**

Attainment: Lectures, labs, readings, small group discussions, and in-class projects.

Expected Outcome: Student understanding of how biological anthropology is both part of anthropology and a biological science. Student understanding of the central theory of modern biology, evolution, as well as other basic fundamentals of biological science (including genetics, cell biology, anatomy, and physiology).

Assessment: exams, lab assignments, and in-class projects.

## **Readings:**

### **REQUIRED:**

#### Required Textbooks

- *Essentials of Physical Anthropology*, 7<sup>th</sup> edition. 2006. R. Jurmain, L. Kilgore, & W. Trevathan. Wadsworth Publishers.

#### Lab Work Packets

- Available the Friday prior to a lab for download on your lab section's WyoWeb page

#### Required Equipment

- CPS Student Keypad (UW bookstore: \$24)
- CPS enrollment code (available online; see "CPS – Classroom Performance System," below)

### **REQUIRED READINGS:**

#### Required Online/Reserve Readings & Videos

URL links to all required readings are available on the course's Wyoweb page.

The readings are:

- "Evolution is a Fact and a Theory" by L. Moran (week 2)
- "NOVA: Intelligent Design on Trial" online video (<http://www.pbs.org/wgbh/nova/id/program.html>)
- "Thinking Anthropologically about "Race" by Y.T. Moses (week 6)
- "Does Race Exist? An Antagonist's Perspective" by L. Brace (week 6)
- "Does Race Exist? A Protagonist's Perspective" by G. Gill (week 6)
- "Forensic Anthropology" by Nelson and Jurmain (week 9)
- "Burying American Archaeology" by C.W. Meighan
- "Sharing Control of the Past" by L.J. Zimmerman.

*Additional, timely, short readings may be assigned during the course of the semester.*

*These will be made available on the course's WyoWeb page.*

### **OPTIONAL:**

Check out the following (available via amazon.com or other bookstores) to see if they would be helpful for you before you buy them:

*Study Guide for Essentials of Physical Anthropology* by D. White

*Virtual Laboratories for Physical Anthropology v3.0* (cd-rom) by J. Kappelman

*Hominid Fossils: An Interactive Atlas* (cd-rom) by J. Ahern

## **Wyoweb Resources:**

The course's Wyoweb page provides a wealth of essential information and resources. Lecture slides will be posted here as well as downloadable documents such as the syllabus, each of the assignments, and exam study guides.

## **Course Policies:**

- Students should attend every class period and every lab.
- Students are expected to actively participate in the discussions, lecture activities, labs and CPS sessions.
- Students are expected to complete all weekly readings by Wednesday's class period.
- Instructors are here to provide assistance in and out of class, but it is the student's responsibility to take advantage of this assistance.
- It is the student's responsibility to know about academic dishonesty. Cases of academic dishonesty will be dealt with following university regulations (<http://www.uwyo.edu/generalcounsel/info.asp?p=3077>).
- Assignments are due at the beginning of class on specified dates. Assignments turned in after that will be docked 15%. **All assignments must be in by 12/01 or they will become zeros.**
- Make-up exams, make-up labs, and make-up alternatives for discussions will only be allowed if absences are officially excused (e.g., a doctor's note)
- Grades will be based upon total point accumulation. Grading scale is as follows: A=90%+ (900+ pts.); B=80-89% (800-899 pts.); C=70-79% (700-799 pts.); D=60-69% (600-699 pts.); F=59% and under (<599 pts.).
- If you have a physical, learning, or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to, University Disability Support Services (UDSS) in SEO, room 330 Knight Hall, 766-6189, TTY: 766-3073.
- **Electronic Devices and Other Potential Distractions:** Cell phones, iPods (and other MP3 players), computer use (other than directly related to class; i.e., note taking), newspapers, magazines, romance novels, sleeping, etc. are not conducive to your classroom learning and may be detrimental to others'. Please refrain from using any of these or similar things in class or lab. For exams that require calculator use, you must use a standard calculator (not the one on your cell phone).

### **Assignments, Exams, Participation, and Grades:**

Grades will be based on reaction statements, labs, exams, and participation.

ASSIGNMENTS:	DUE DATE	POINTS	% OF GRADE
<b>Lab Assignments</b>			
There will be 13 lab sessions with 11 lab assignments. Due dates will be posted on the assignment. (See also "Lab Sessions," below)	See Lab Syllabus	200	20%
<b>Reaction Papers</b>			
1 page statements reacting to assigned readings on controversial issues.		150	10%
- Evolution & Creation	Week 3 lab		
- Is Race Real?	Week 6 lab		
- NAGPRA & Repatriation	Week 11 lab		
EXAMS:	DATE	POINTS	% OF GRADE
<b>Mini-Exam</b>			
- A short multiple choice test in lecture - Intended to provide early semester assessment of learning	9/19	50	5%
<b>Exam 1</b>			
- Exams 1-3 will cover both lecture and lab material. - Multiple choice, identification, short answer & short essay format	10/14 – 10/20	200	20%
<b>Exam 2</b>			
	12/1 – 12/5	200	20%
<b>Final Exam</b>			
- Cumulative, covers the entire semester - Multiple choice & short essay format emphasizing synthetic understanding	12/8 (10:15 am)	100	10%
PARTICIPATION:	DATE	POINTS	% OF GRADE
<b>Contribute a digital photograph</b>			
Each student must provide a digital photograph for use in the student roster. Instructors can take the photo for you during their office hours. The images will be used exclusively to help the instructors learn students' names	9/5	10	1%
<b>CPS/class participation</b>			
Students will need to participate in class using their CPS keypads on most class days. Responses will <i>not</i> be graded, rather participation will be. (see CPS sections, below)	TBD (must be CPS-registered by 8/29)	90	9%
Totals:		1000	100

### **CPS - Classroom Performance System**

CPS allows all students to be active learners in this class. During most classes, you will need to use your CPS keypad to take part in surveys, answer questions, and work on tasks together with other students. Your participation in these activities will be graded but your answers will not (you must have participated in 90% of the CPS sessions to get full CPS participation credit; 90%+ participation will count as extra credit). CPS sessions that count toward your participation grade will begin 8/29/08, although trial sessions will begin before this date. Thus, you will need to purchase a CPS keypad and an enrollment code and have registered with CPS before class time on 8/29/08.

The CPS keypad is available from the UW bookstore, while the CPS enrollment code is cheapest if purchased online while enrolling in the CPS component of the course. Buying a code online requires either a credit card or a debit card. If you do not have one of these, you might be able to purchase an enrollment code at the UW bookstore. Once you have purchased your keypad and/or enrollment code, go to [www.cyberclass.com/hggstudent.cfm](http://www.cyberclass.com/hggstudent.cfm) to register for the CPS component of this course (have your credit/debit card ready if you did not purchase an enrollment code from the bookstore).

You will need your CPS Class Key:

**CPS Class Key for Anth 1100: F36801C912**

If you have any problems or would just like help running through the process, please visit the instructors for assistance. Finally, CPS remotes will be used for the multiple choice sections of the exams.

**Important:** Bringing someone else's keypad to class and using it for them is *academic dishonesty* and will be dealt with accordingly.

**Lab Sessions**

There will be thirteen lab sessions over the course of the semester, and they will meet in the Lab Classroom (Anthropology Building 140). Students will need to register for a lab section (see Course Schedule). A separate Lab Syllabus will be provided in the first week of lab. There will be a lab assignment for eleven of the labs. Although the lab time should be sufficient to complete the assignment, usually it will not be due until the following class period (see you Lab Syllabus for exact due dates). There will be three exams held during lab section. These exams will cover both lecture and lab content. Monday's lab section will meet last on a particular lab. Please note that Monday's section will take Exam 2 on December 1.

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**TENTATIVE CLASS SCHEDULE FOR ANTHROPOLOGY 1100, FALL 2008**

**NOTE:** A full lab schedule will be distributed in the first week of lab.

**Week 1: August 25 - 29 (#1 - #3)**

TOPIC: Introduction, Scientific Method

READINGS: Jurmain Ch. 1 & 2

LAB: NO LAB

**DUE 8/29:** Must have CPS keypad & be CPS registered by this date

**September 1: NO CLASS, no Monday lab**

**Week 2: September 3 - 5 (#4 & #5)**

TOPIC: History of Evolutionary Thought

READINGS: Jurmain Ch. 2

LAB: Scientific method

**DUE 9/5: Digital Photo**

**Week 3: September 8 - 12 (#6 - #8)**

TOPIC: Science and Evolution, Inheritance, Modern Evolutionary Synthesis

READINGS: Jurmain Ch. 3 & 4, "Evolution is a Fact and a Theory" by L. Moran (available at <http://www.talkorigins.org/faqs/evolution-fact.html>)

REQUIRED VIDEO: *Intelligent Design on Trial* available to watch at <http://www.pbs.org/wgbh/nova/id/program.html>

LAB: Discussion and problem set regarding science and evolution in K12 education

**DUE at time of Lab:** Reaction Statement on Evolution & Creation

**Week 4: September 15 - 19 (#9 - #11)**

TOPIC: Population Genetics, Biocultural Evolution

READINGS: Jurmain Ch. 4 & 12, Appendix C

LAB: Population Genetics and Biocultural Evolution

**Important:** Bring a calculator to all lectures and lab

**MINI-EXAM** – Friday, 9/19

**Week 5: September 22 - 26 (#12 - #14)**

TOPIC: Biocultural Evolution, Race and Variation in Modern Populations

READINGS: Jurmain Ch. 12, "Thinking Anthropologically about "Race" by Y.T. Moses (WyoWeb), "Does Race Exist? An Antagonist's Perspective" by L. Brace ([www.pbs.org/wgbh/nova/first/brace.html](http://www.pbs.org/wgbh/nova/first/brace.html)), & "Does Race Exist? A Protagonist's Perspective" by G. Gill ([www.pbs.org/wgbh/nova/first/gill.html](http://www.pbs.org/wgbh/nova/first/gill.html))

LAB: Human Skeleton

**Week 6: September 29 – October 3 (#15 - #17)**

TOPIC: Human Variation & Adaptation, Macroevolution

READINGS: Jurmain Ch. 5

LAB: Human Variation & Biological Classification

**DUE at time of lab:** Reaction statement on "Is race real?"

**Week 7: October 6 - 10 (#18 - #20)**

TOPIC: Macroevolution, Primate Evolution, Primate Characteristics

READINGS: Jurmain Ch. 6 & pp. 158 – 163 in Ch. 8

LAB: Macroevolution

**Week 8: October 13 - 17 (#21 - #23)**

TOPIC: Primate Behavior

VIDEOS: *Monkey in the Mirror*, *Social Climbers*

READINGS: Jurmain Ch. 7

LAB: **Exam 1**

**Week 9: October 20 - 24 (#24 - #26)**

TOPIC: Primate Behavior, Ethics of Studying Primates

READINGS: Jurmain Ch. 7

VIDEO: *Food for Thought*

LAB: Primate Characteristics and Adaptations

**Week 10: October 27 - 31 (#27 - #29)**

TOPIC: Human Osteology, Forensic Anthropology, Ethics & NAGPRA

READINGS: Jurmain Appendix A, "Forensic Anthropology" by Nelson & Jurmain

LAB: Forensic Anthropology

**Week 11: November 3 - 7 (#30 - #32)**

TOPIC: Ethics of Studying Human Bones, Paleoanthropology, Bipedalism

READINGS: Jurmain Ch. 8, "Burying American Archaeology" by C.W. Meighan, and "Sharing Control of the Past" by L.J. Zimmerman. (Meighan & Zimmerman readings available at: <http://www.archaeology.org/online/features/native/debate.html>)

LAB: Ethics in Biological Anthropology

**DUE at time of lab:** Reaction statement on NAGPRA and repatriation.

**Week 12: November 10 - 14 (#33 - #35)**

TOPIC: Hominid evolution: Bipedalism, Hominid Origins

READINGS: Jurmain Ch. 8

Video: TBD

LAB: Early Hominid Evolution

**Week 13: November 17 - 21 (#36 - #38)**

TOPIC: Hominid Evolution: Late Australopithecines, Archaic Humans

READINGS: Jurmain Ch. 9 & 10

LAB: Later Hominid Evolution

**Week 14: November 24 (#39)**

TOPIC: Hominid Evolution: Modern Humans

READINGS: Jurmain Ch. 10 & 11

LAB: Lab for Monday's section, only

**November 26 - 28: NO CLASS, Thanksgiving Break**

**Week 15: December 1 – 5 (#40 - #42)**

TOPIC: Modern Humans, Post-Ice Age Evolution

VIDEO: *Neandertals on Trial*

READINGS: Jurmain Ch. 11 & 14

LAB: **Exam 2**

**DUE 12/01:** All Late Assignments (@ 15% off; No assignments accepted after this date)

**FINAL EXAM: Monday, December 8, 10:15 a.m. – 12:15 p.m., CR 314**