

HUMAN GROWTH AND DEVELOPMENT

ANTHROPOLOGY 369
CRN: 35875

SPRING
2018

Class Time: Monday, Wednesday 3:30-4:50

Location: Living-Learning Center South (LLCS) 101

Instructor: Dr. Klaree Boose

Email: boose@uoregon.edu

Office: 374 Condon Hall

Office Hours: Thursday 1:00-3:00

GE: Josh Schrock (jschroc2@uoregon.edu) | Office Hours:

Course Overview: This is a science group satisfying course that examines key issues in human growth and development, focusing particular attention on human physical growth. In this course, human growth and development is viewed as a biocultural process that demands an integrated analysis. This course uses a scientific approach, drawing on the methods, theories, and bodies of knowledge from various scientific disciplines, including evolutionary biology, genetics, neuroscience, physiology, nutritional sciences, and medicine.

Course Format: This course has three main sections.

Section 1 builds the framework for understanding human growth and development. This section begins by providing an historical overview of growth studies, focusing particular attention on developments during the 20th century. This is followed by discussions of the scientific method and evolutionary theory, with particular attention directed towards the adaptation concept and life history theory. This comparative evolutionary perspective on human growth incorporates studies of living primates and fossil human ancestors.

Section 2 focuses on the basic principles of human growth and development, from conception through older adulthood. For each life stage, the major shifts in anatomy, physiology, and brain development are discussed. This section also covers techniques for assessing human growth status and the application of the knowledge of patterns of growth and development to bioarchaeology and forensic anthropology.

Section 3 focuses on variation in human growth and development. Beyond simply describing differences in growth and development within and between groups, this course uses a

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biocultural framework that incorporates genetic, social, and ecological factors to explain why these patterns of variation exist. This section spends considerable time on illustrating how specific dietary factors, disease exposure, and parenting practices can shape variation in growth and development, as well as patterns of aging.

Required Texts: Assorted articles and book chapters (see below – all available on Canvas)

Canvas: A Canvas site will be maintained for this class, which will be your main source for course information, documents, lab materials, and announcements. Make sure that you regularly check your Canvas-linked e-mail account.

Assignments and Expectations: Regular attendance at lectures and participation in laboratory sections are required. Course readings are required and are essential to passing exams, completing lab assignments, and participating in lab section activities. Your grade in the course will reflect our performance on a midterm exam, final exam, two quizzes, four short (2-3 pages each) reaction papers, and 4 short (1-2 pages) lab write-ups.

Grading: There will be no make-up assignments or extensions without a documented reason. Grades will be posted on Canvas. It is your responsibility to check your grades regularly and to report any problems (e.g. if you are missing credit).

CONTENT:

Quiz 1 (online; must be taken between 4/27-4/29).....	10%
Midterm Exam (Wednesday, Week 6)	25%
Quiz 2 (online; must be taken 5/25-5/27).....	10%
Reaction Papers (4 @ 5% each)	20%
Lab Exercises (4 write-ups @ 2.5% each).....	10%
Final Exam (Thursday, June 14, 2:45pm)	25%

GRADE SCALE:

A+ = 98%	A = 94%	A- = 90%	B+ = 88%	B = 84%
B- = 80%	C+ = 78%	C = 74%	C- = 70%	D+ = 68%
D = 64%	D- = 60%	F = < 60%		

1. Exams

The midterm and final exams will be based on lectures, videos, readings, and class discussions, and will include objective (multiple choice & matching), fill-in-the-blank, short answer, and short essay sections. The final exam will emphasize the material from the second half of the class, but it will also require

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integration of course material from throughout the course (not just the material introduced after the midterm).

2. Response Papers

During the quarter, each student will write four short (2-3 page) response papers on articles and/or videos provided by the instructor (see "Special Topics" on the schedule). These response papers provide opportunities for discussion and critical analysis of current biological, cultural, and social issues related to human growth and development. Reaction papers are only 2-3 pages long so writing should be concise and focused around a couple of main points. Response papers are due the week of discussion section (with the exception of the first week). Guidelines for the response papers can be found in the Week 1 Module. In addition to the response papers, you are expected to discuss what you have written during the corresponding lab section. Your participation in these discussions is an essential component to this course.

3. Lab Exercises

During the quarter, each student will write four short (1-2 pages) lab write-ups based on the exercises and questions from lab activities. Lab exercise write-ups are due in lab the following week. **All lab sections are held on Thursdays in Condon 368 and will be run by Josh Schrock.**

Accommodations:

Appropriate accommodations will be provided for students with documented disabilities. If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet or discuss with me immediately. You will need to provide me with a notification letter from Disability Services outlining your approved accommodations.

Personal Issues:

If there is a serious issue related to your ability to participate in our course, you need to contact me immediately. Delay in asking for help right away will cause you to fall seriously behind in the course, and make-up work will not be accepted unless prior accommodations have been made. Examples of serious issues include your computer crashes, you are ill and can provide a doctor's note explaining it is not advisable for you to participate in our class, a family death, etc.

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Academic Dishonesty:

The University of Oregon and I consider academic honesty to be essential for each student's intellectual development. As an institution fundamentally concerned with the free exchange of ideas, our University depends on the academic integrity of each of its members. In the spirit of this free exchange, students and teachers of our University recognize the necessity, and accept the responsibility, for academic honesty. As a student who enrolls in this course, you agree to respect and acknowledge the research and ideas of others in your work and to abide by those rules for progress papers, discussions, posts, final projects, etc.

Plagiarism:

Plagiarism is defined as the use of intellectual material produced by another person without acknowledging its source. For example:

- Wholesale copying of passages from works of others into an assignment, paper, discussion board forum posting
- Using the views, opinions, or insights of another without acknowledgment
- Paraphrasing another person's characteristic or original phraseology, metaphor, or other literary device without acknowledgment
- For further information about the UO policy on plagiarism and matters of social conduct, please refer to your student handbook. Also, the UO provides excellent resources to help you avoid plagiarism. Check out <http://library.uoregon.edu/guides/plagiarism/students/index.html>

You can find proper use and examples of citation methods at the University of Oregon library website: <http://library.uoregon.edu/guides/citing/apa.html>

GENERAL INFORMATION

ADA Statement: Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Students may also wish to contact UO Disability Services Office at 541-346-1155. NOTE: As per FERPA regulations Faculty are no longer automatically informed as to the ADA status of students. If you have special requirements, you must bring your information to me as soon as possible.

Equal Opportunity Compliance Statement: It is the policy of the University of Oregon Board of Directors that there will be no discrimination or harassment on the basis of age, disability, gender, marital status, national origin, race, religion, sexual orientation, or veteran status in any educational programs, activities or employment. Persons having questions about equal opportunity and non-discrimination should contact the Office of Affirmative Action at 541-346-3123.

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Course Schedule (subject to change):

Week	Date	Topics	Reading Assignments
1	4/2	Introduction to the course; Historical perspective and approaches	1) Bogin 1999 3) Tanner 1998
	4/4	Review of scientific method and evolutionary theory	<u>Lab Reading:</u> 1) BBC Article 2) Misconceptions/Peppered Moth 3) Bering 2012 4) Ball & Russell 2014 5) Rosenberg & Trevathan 2014
	4/5	<u>Lab 1: Scientific method and evolutionary theory exercise (write-up due in lab the following week)</u>	
2	4/9	No class – AAPA meetings	<u>Homework Reading/Video:</u> 1) Pollack 2013 (link) 2) Pollack 2015 (link) 3) Video: Nova – Cracking Your Genetic Code
	4/11	No class – AAPA meetings	
	4/12	<u>No Lab 2; **Homework Assignment** Special topics discussion 1: Genetic screening; Response paper 1 (due online 4/15)</u>	
3	4/16	Basic principles of growth; methods for assessing growth	1) Cameron 2012 2) Cole 2013 3) Wiley & Allen 2013
	4/18	Evolutionary/comparative perspective on growth	1) Bogin 2012
	4/19	<u>Lab 3: Anthropometry: assessing growth and development (write-up due in lab the following week)</u>	
4	4/23	Human brain evolution and our unique life history	1) Leonard et al. 2012
	4/25	Prenatal growth and development; Embryology; <i>Video: Life's Greatest Miracle</i>	1) Berk & Meyers 2015 (Ch. 3)
	4/26	<u>Lab 4: Fetal development and embryology (write-up due in lab the following week)</u> **Quiz 1 on material from Weeks 1-4 (online to be taken between 4/27-4/29)	
5	4/30	Pregnancy; fetal programming/developmental origins of health and disease	1) Low et al. 2015
	5/2	Birth; Infancy and breastfeeding	1) Trevathan 2015 2) Trevathan & Rosenberg 2014 3) Berk & Meyers 2015 (Ch. 5, partial) 4) Hoi & McKerracher 2015
	5/3	<u>Lab 5: Special topics discussion 2 – Homebirth and co-sleeping; Response paper 2 (due in lab section)</u>	<u>Lab Reading:</u> 1) Kerrigan 2013 2) Gettler & McKenna 2010 3) Belluck 2015

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Course Schedule (cont'd):

Week	Date	Topic	Reading Assignments
6	5/7 5/9 5/10	Catch-up/review for MIDTERM MIDTERM Lab 6: Video – Secret Life of the Brain	No new readings (get head start on next week's)
7	5/14 5/16 5/17	Childhood and juvenile stages Puberty; adolescent growth and development Lab 7: Skeletal development (write-up due in lab the following week)	1) Berk & Meyers 2015 (Ch. 8, partial) 2) Berk & Meyers 2015 (Ch. 11, partial) 1) Berk & Meyers 2015 (Ch. 14) <u>Lab Reading:</u> 1) Loth & Iscan 2000
8	5/21 5/23 5/24	Reproductive maturity; Emerging adulthood; Social dimensions of adolescence and the transition to adulthood Reproductive ecology; Human energetics; Regulation of fecundity (female and male reproductive ecology) Lab 8: Special topics discussion 3 – Academic pressure and teen suicide; Response paper 3 (due in lab section) **Quiz 2 on material from Weeks 6-8 (online to be taken between 5/25-5/27)	1) Berger 2011 2) Gluckman & Hanson 2006 1) Vallengia & Nunez-de la Mora 2015 <u>Lab Reading:</u> 1) Rosen 2015 (link)
9	5/28 5/30 5/31	No class – Memorial Day Senescence Lab 9: Video – Rx for Survival	No new readings (catch-up if necessary)
10	6/4 6/6 6/7	Variation in growth; Environmental influences; Effects of nutrition and infectious/parasitic disease; Stress determinants of health Catch-up/review for FINAL EXAM Lab 10: Special topics discussion 4 – Obesity and fat stigma; Response paper 4 (due in lab section)	1) Stinson 2012 <u>Lab Reading:</u> 1) Levinovitz 2015 (link) 2) Luchesi 2015 (link)
Finals Week	6/14	FINAL EXAM: Thursday, same room (LLCS 101) 2:45-4:45pm	