ANTH 369: Human Growth & Development

Fall 2017

University of Oregon
(4 Credit Hours; Satisfies SC requirement)

Note: Please print this document for your records.

Course Location: 125 McKenzie Hall (MCK)
Course Time: 12:00-1:20 pm, Tuesday and Thursday
Lab Location and Time: Condon Hall, Rm 368, Monday

Instructor: Dr. Lawrence Ulibarri
Office: 354 Condon Hall
Office Hours/phone: Tuesday 3:30-5:00, Wednesday 1:30-3:30 and by appointment, 541-346-8188
E-mail: larryu@uoregon.edu

GE: Mr. Noah Simons, M.S.
Office: TBA
Office Hours: TBA
E-mail: nsimons@uoregon.edu

COURSE DESCRIPTION (Brief)

Examines key issues in human and nonhuman primate growth and development; addresses genetic, social, and ecological determinants of variation in growth.

COURSE DESCRIPTION (Full)

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.

LEARNING OBJECTIVES
After successful completion of this course, students will have an understanding of the following key issues in the study of Scientific Racism:

- Critique and interpret the notion of race as biology and culture. This will be measured throughout the course in our labs/discussions, exams, and lab project.
- Apply knowledge of the history of racial concepts to the modern world. This will be partly measured by your exams, lab discussions, and in your lab project.
- Understand the role of anthropology in supporting and deconstructing race. This will be partly measured by your exams, lab discussions, and in your lab project.
- Understand the use and misuse of the scientific method towards racial bias and other forms of prejudice from both a historic and contemporary perspective. Explore how the bias in science is related temporally. This will be partly measured by exams, lab discussions, and in your lab project.
- Conduct research and give a presentation/research paper on a concept related to scientific racism. This will be partly measured by your lab discussions and lab project.

COURSE FORMAT

The course is designed in a Lecture/Discussion and Lab Format. There will be two lecture meetings per week. Lectures will occasionally combine in-class discussion related to the material we are exploring.

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 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.

In total, students should expect to spend **10 to 15+ hours** of work outside of class time for this course, including the time devoted to reading, studying, and completing assignments.

**WORKING IN STUDENT GROUPS**

Each student will participate in a group, and as a group you will give one presentation. Groups will typically consist of between 4 to 6 people. This presentation should be a combined presentation/discussion that is cohesive (i.e. not 5 individual presentations on 5 different topics), and all people in the group need to work on the presentation and present. After group sign-up, if you wish to change groups please let me know ASAP. Otherwise, switching groups will not be permitted unless extenuating or special circumstances warrant switching groups later in the term. Because you are developing a presentation and critical analysis as a group, you might consider using online resources to develop, create, and edit your group presentations, such as Google Docs ([http://www.google.com/docs/about/](http://www.google.com/docs/about/)) and Prezi ([http://prezi.com/](http://prezi.com/)). Each presentation needs to be 25 minutes in length at most, and should include a few discussion questions.

**CANVAS**

This course is supported by an online CANVAS site. Our Canvas learning support site will help you to complete academic work and study for exams. As this is an online site, you can access it anywhere. Online articles, relevant links, notes, and other relevant information will be included on the course site. PLEASE GO TO MODULES to find all of this information, which will be uploaded each week. Course notes will not be uploaded until after class, usually by the end of the week. There will be weekly articles that you are required to read and those articles will be provided to you online. When you register for the class, you will automatically be enrolled in our canvas site. All problems concerning the use of Canvas should be handled at the ITC center in the Knight Library. Issues more specifically related to the accessibility of course material should be directed to me. Make sure that you regularly check your e-mail account which will notify you of material and announcements placed on our Canvas site.

**EXPECTATIONS AND GRADING**
Regular attendance, participation, and maintaining course readings are required to pass this course. Grades are based on a midterm exam, final exam, four short (2-3 pages) reactions papers, 4 short (1-2 page) lab write-ups, and an in-class presentation as a group including a presentation research paper (1x). Under no circumstances will make-up assignments or extensions be given without a documented and cleared excuse (see Accommodations). You will not receive credit for a late assignment unless you notify me in advance. Evaluation will be based on the following components:

1) **Midterm & Final Exams:** The midterm and final exams will be based on lectures, readings, videos, and discussions, and will include objective (multiple choice & matching), fill-in-the-blank, short answer (2-3 sentences), and short essay sections (4-5 sentences). The final exam is cumulative, so don’t forget everything from the first half of our term!

2) Lab Participation – this includes attendance and your participation in our weekly Lab Sections.

3) Lab Write-ups – During the quarter, each student will write four short (1-2 page) 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 Monday in 368 Condon and will be run by our GE.**

4) Reactions papers - During the quarter, each student will write four short (2-3 page) reaction papers on articles 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. Reaction papers are due the week of discussion section. Your participation in these discussions is an essential component to this course.

5) Group presentation – each student group will present and lead discussion during one of the designated presentation days. This will require you to go beyond the reading and lecture, and to work in groups. Grading will be based on the quality put into your presentations / discussions. I will provide a rubric so you are aware of how this is graded. The following is expected of your group presentation:
   a. Design a short presentation (15 mins) based on your groups thoughts, ideas, and new material that you read for the discussion. This might include a short interactive assignment or video, but does not need to.
   b. Design a few questions based on the material covered that we can discuss as a class. You might even send out these questions to our class a few days before the discussion to allow people a chance to develop ideas.

6) Presentation Research Paper – On your presentation day, you’ll be required to submit a short research paper (2 to 4 pages) that highlight your thoughts, ideas, questions that you developed, the research that you did for your presentation, how this relates to the course and course material, and any additional material you want to include. **This should be brought to me in hard copy.** This is NOT a rehash of your entire groups’ discussion, but a highlight of what you personally
did to prepare for and contribute to the discussion, and to demonstrate critical thinking. Include a References Cited section, and be sure to cite your sources in text appropriately.

GRADING

The weight of each form of evaluation to the total course grade is as follows:

- Exams (n=2, ~100 pts each) 50% (200 pts)
- Lab Participation/attendance (n=9, 2 pts each) ~5% (18 pts)
- Lab Write-ups (n=4, 10 pts each) 10% (40 pts)
- Reactions Papers (n=4, 20 pts each) 20% (80 pts)
- Group Presentation project 12.5% (50 pts)
- Presentation Paper write-up ~2.5% (12 pts)
- TOTAL 100% (400)

Grades will be assigned as follows:
A+ = 97% and above.
A = 93-96.9%,
A- = 90-92.9%

B+ = 87-89.9%
B = 83-86.9%,
B- = 80-82.9%

C+ = 77-79.9%
C = 73-76.9%,
C- = 70-72.9%

D+ = 67-69.9%
D = 63-66.9%,
D- = 60-62.9%

F = 59.9% and below

The grading system used in this course is as follows:

A – Outstanding performance relative to that required to meet course requirements; demonstrates a mastery of course content at the highest level.
B – Performance that is significantly above that required to meet course requirements; demonstrates a mastery of course content at a high level.
C – Performance that meets the course requirements in every respect; demonstrates an adequate understanding of course content.
D – Performance that is at the minimal level necessary to pass the course but does not fully meet the course requirements; demonstrates a marginal understanding of course content.

F – Performance in the course, for whatever reason, is unacceptable and does not meet the course requirements; demonstrates an inadequate understanding of the course content.

There is no extra credit for this course.

REQUIRED TEXTS

Articles and book chapters posted to our Canvas site (no required purchased textbook). Regular Canvas readings will be posted, be sure to regularly check. A list of all Required Readings is provided below (see Course Reading Schedule below) following the Course Schedule.

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.

I will post my lecture slides online after each lecture, and typically at the end of the week.

Exams and assignments must be taken/turned in at the scheduled time—under no circumstances will make-up exams or assignment extensions be given without a documented excuse (see Personal issues). If you will not be able to take an exam or turn in an assignment, you must notify your GTF or me in advance (preferably by e-mail).

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 you are ill or there is a family death, and can provide a doctor’s note explaining that it is not advisable for you to participate in our class during specified dates. Additionally, a conference participation, participation in or travel associated with other events related to campus organizations, clubs, or groups so long as you can provide verification from student services that we are unable to be in class during specified dates.
ACADEMIC HONESTY

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 in both lecture and lab classes.

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 discussion or presentation
• 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](http://library.uoregon.edu/guides/plagiarism/students/index.html).
Please, for your protection and development, cite you sources properly and do not plagiarize. You can find proper use and examples of the APA citation method at the University of Oregon library website: [http://researchguides.uoregon.edu/citing-plagiarism/styleguides](http://researchguides.uoregon.edu/citing-plagiarism/styleguides)
NOTE: Class schedule is subject to change in the event of extenuating circumstances, or otherwise modified as appropriate.

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<thead>
<tr>
<th>Week</th>
<th>Dates (m/d)</th>
<th>Topics</th>
<th>Reading Assignment</th>
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| 1    | 09/26       | Introduction and course overview; Why study growth? Introduction to GenEd & the scientific method; Evolutionary & biocultural approaches; Human auxology | 1) Begin 1999  
  2) Rosenberg & Trevathan 2014  
  3) Ball & Russell 2014 |
|      | 09/28       | Historical perspective on human growth & development; Different approaches to studying growth & development | 1) Tanner 1998 |
| Mon  |             | Lab 1: Introduction to the Course; Scientific Method & Evolutionary Theory Exercise  
  **(Lab write-up due in lab the following week)** | Lab Reading:  
  Bering 2012, Wilson 2007, additional articles |
| 2    | 10/03       | Basic principles; Methods for assessing growth and maturity; Biocultural perspective on growth & development | 1) Cameron 2012  
  2) Cole 2013  
  3) Wiley & Allen 2013 |
|      | 10/05       | Evolutionary/comparative perspective on human growth | 1) Begin 2012 |
| Mon  |             | Lab 2: Anthropometry; Assessing growth and development  
  **(Lab write-up due in lab the following week)** | Lab Reading:  
  Anton & Snodgrass 2009 |
| 3    | 10/10       | Human brain evolution and our unique life history | 1) Leonard et al. 2012 |
|      | 10/12       | Prenatal growth & development; Embryology  
  *Video: Life’s Greatest Miracle* | 1) Berk & Meyers 2015 (Ch. 3) |
  **RESPONSE PAPER DUE IN LAB SECTION** |
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<tr>
<th>Week</th>
<th>Date(s)</th>
<th>Topic(s)</th>
<th>Reading(s)</th>
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<tbody>
<tr>
<td>4</td>
<td>10/17</td>
<td>Prenatal growth &amp; development (cont’d); Pregnancy; Fetal Programming/Developmental Origins of Health, Birth</td>
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<td></td>
<td>10/19</td>
<td>Birth (cont’d), Infancy &amp; Breastfeeding</td>
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<td></td>
<td>Mon</td>
<td><strong>Lab 4: Fetal Development &amp; Embryology</strong> <em>(Lab write-up due in lab the following week)</em></td>
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|      |         | 1) Low et al. 2015  
|      |         | 2) Trevathan 2015  
|      |         | 3) Trevathan & Rosenberg 2014  
|      |         | 1) Berk & Meyers 2015 (Ch. 5, partial)  
|      |         | 2) Hoi & McKerracher 2015  |
| 5    | 10/24   | Childhood & juvenile growth; Why grow up? |
|      | 10/26   | Guest Lecture: TBA |
|      | Mon     | **Lab 5: Special Topics Discussion II: Co-Sleeping** *(Kerrigan 2013, Gettler & McKenna 2010, and/or March of Dimes N.D.)*  
|      |         | **REACTION PAPER DUE IN LAB SECTION TODAY** |
|      |         | 1) Berk & Meyers 2015 (Ch. 8, partial)  
|      |         | 2) Berk & Meyers 2015 (Ch. 11, partial)  |
|      |         | Reading TBA  
|      |         | **Lab readings: Kerrigan 2013, Gettler & McKenna 2010, and/or March of Dimes N.D.** |
| 6    | 10/31   | **Midterm Exam** |
|      | 11/02   | Puberty; Adolescent growth & development |
|      | Mon     | **Lab 6: Video: Secret Life of the Brain** *(NOT covered on the midterm exam, but covered on the Final exam)* |
|      |         | 1) Berk & Meyers 2015 (Ch. 14)  |
| 7    | 11/07   | Reproductive maturity; Emerging Adulthood; Social dimensions of adolescence and the transition to adulthood |
|      | 11/09   | Reproductive ecology; Regulation of fecundity in females and males |
|      | Mon     | **Lab 7: Skeletal Development** *(Lab write-up due in lab the following week)* |
|      |         | 1) Berger 2011  
|      |         | 2) Gluckman & Hanson 2006  
|      |         | 1) Valeggia & Núñez-de la Mora 2015  |
|      |         | Lab Reading:  
<p>|      |         | Loth &amp; Iscan 2000  |</p>
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<th>Week</th>
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<th>Topic</th>
<th>Reading/Assignment</th>
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<tr>
<td>8</td>
<td>11/14</td>
<td>Variation in growth between populations; Genetic influences on growth</td>
<td>Stinson 2012</td>
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<td></td>
<td>11/16</td>
<td>Within population variation in growth; Secular trends; Environmental influences on growth; SES; Psychosocial stress; Nutrition; Infectious/parasitic disease</td>
<td>No new readings for this lecture</td>
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<td>Mon</td>
<td>Lab 8: Special Topics Discussion III: Academic pressure and teen suicide (Rosin 2015) <strong>RESPONSE PAPER DUE IN LAB SECTION</strong></td>
<td>Lab Reading: Rosin 2015</td>
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<td>9</td>
<td>11/21</td>
<td>Presentation days</td>
<td>No new readings</td>
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<td>11/23</td>
<td>No lecture, Thanksgiving break</td>
<td>Presentations questions represent testable material</td>
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<td>Mon</td>
<td>Lab 9: Video: Rx for Survival: A Global Health Challenge (Back to the Basics)</td>
<td>No new readings</td>
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<td>10</td>
<td>11/28</td>
<td>Presentation days</td>
<td>No new readings</td>
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<td>11/30</td>
<td>Presentation days</td>
<td>Presentations questions represent testable material</td>
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<td>Mon</td>
<td>Lab 10: Special Topics Discussion IV: Obesity &amp; fat stigma (Levinovitz 2015 &amp; Lucchesi 2015) <strong>RESPONSE PAPER DUE IN LAB SECTION</strong></td>
<td>No new readings</td>
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<tr>
<td>11</td>
<td>12/04</td>
<td>Monday: Final Exam, same room (125 MCK) Time – 8:00-10:00 am</td>
<td>Exam</td>
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