Anthropology 3515 section DD35

Human Evolutionary Anatomy

Fall 2025

TIME: MWF, period 3 (9:35 AM - 10:25 AM)

PLACE: CSE E221

INSTRUCTOR: David Daegling, B376 Turlington Hall 294-7603

daegling@ufl.edu

Office Hours: M 10:30 – 11:30 AM; W 1:00-3:00 PM.

TEXTS: The following books are available at the UF Bookstore:

Cartmill, Shafland & Hylander, *Human Structure* (*HS*), 1987, Harvard University Press, is **required**.

Kapit & Elson's *The Anatomy Coloring Book* (*ACB*), 2002 (4th ed., Harper & Row) is **recommended**.

Stern's *Core Concepts in Anatomy* (1997, Lippincott Williams & Wilkins) is an **optional** review text.

Lecture Supplements (*HEA*) are accessible through the Files tool on Canvas.

All other course materials are accessed through Canvas: http://lss.at.ufl.edu/

This course counts for 3.0 credit hours.

There are no additional materials and supplies fees for this course

PREREQUISITES: ANT 3514C or BSC 2010, BSC 2011 or PCB 4674. Please contact the instructor if you have any questions about these prerequisites.

COURSE CATALOG DESCRIPTION: Survey of human anatomy from evolutionary and embryological perspectives. The phylogenetic and functional basis for human form. Anatomical principles underlying developmental and functional disorders are explored through clinical and comparative examples.

COURSE OBJECTIVES: In this course, you will learn how to use the facts of anatomy to understand human adaptation as well as how evolutionary and developmental processes have shaped the human body. Over the course of the semester, while we survey regional and systemic human anatomy, we will also explore the embryological and historical basis for human structure and evaluate the evolutionary significance of anatomical relationships and variations. The **Student Learning Outcomes** (SLOs) listed below detail the foundational knowledge as well as analytical and communication skills you will acquire through successful completion of this course.

- **SLO1**. Remember the spatial relationships of anatomical structures on a regional basis.
- SLO2. Understand the functional relationships of anatomical structures on a systemic basis.
- SLO3. Understand the meaning of anatomical nomenclature to facilitate recall of SLOs 1 and 2.
- **SLO4**. Apply principles of embryology to conceptualize the limits of anatomical variation.
- **SLO5**. Analyze the function of anatomical systems to infer adaptive utility in the human body.
- SLO6. Evaluate evolutionary influences on human form based on comparative inferences.

COURSE REQUIREMENTS AND ASSESSMENT: The sole grading criterion for the course is your performance on five closed-book midterm examinations (65% of the course grade), online quizzes (10%) and an open-book final examination (25% of the course grade). There are 1000 possible points in the course. Your point total (rounded to the next whole point) determines your final grade without exception. Breakdown of final grades is based on points as follows:

A 920 and above	B+ 840-879	C+ 720-759	D+ 600-639	E < 500
A- 880-919	B 800-839	C 680-719	D 550-599	
	B- 760-799	C- 640-679	D- 500-549	

Current UF policies for assigning grade points may be found at https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

OTHER POLICIES:

This course complies with all UF academic policies. For information on those polices and for resources for students, please navigate to <u>UF's Academic Policies and Resources</u> page.

Silence your smart phones and other electronic devices during lecture.

Attendance is not taken; however, lecture periods are the only time the material is formally covered and the instructor will not review lecture material outside of class.

Midterm examinations are administered during scheduled class times as outlined in the syllabus. All midterms are closed book format; no printed, written, verbal or electronic sources may be

consulted during an examination. Exams missed for reasons other than illness or family emergency must be approved prior to the scheduled examination. Documentation for missed exams is required. Missed examinations are to be made up the final day of class (12/3) by arrangement with the instructor. Examinations may not be retaken. Online quizzes must be taken at specified times and may not be made up. The final examination will be given on Wednesday, 12/10/2025 from 10AM – 12 Noon in CSE E221; the final is an open-note exam, but you may not use any electronic resources or devices during the exam. Failure to take the final will result in a score of zero.

Students seeking modification of due dates for class participation, assignments, and exams for religious reasons should contact the instructor well in advance to request this modification, which will then be arranged.

Any issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact Prof. John Krigbaum (krigbaum@ufl.edu, (352) 294-7540), Chair of Anthropology. Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (http://www.ombuds.ufl.eduLinks to an external site.; 352-392-1308) or the Dean of Students Office (http://www.dso.ufl.eduLinks to an external site.; 352-392-1261).

You are responsible for materials posted on <u>E-Learning (Canvas)</u>, including required readings, announcements, details on assignments, and other supplementary material. Canvas technical support available at https://elearning.ufl.edu/student-help-faqs/. The instructor will use the Canvas Announcement tool to make general class announcements but may contact you directly through email about your work. You are responsible for checking your official UF email regularly to be aware of communication from your instructor. There are no allowances for students who fail to read their email announcements or whose inboxes are full at the time an announcement is sent. To manage your Canvas notifications, in your Canvas "Account," click on "Notifications." Set the notification for "Submission Comment" to either "Notify Immediately" or "Daily Summary." Your instructor will typically communicate with you regarding your assignments through Submission Comments more so than e-mail.

The <u>UF Libraries</u> provide access to numerous resources and services that will help you succeed in this course. Access thousands of <u>online databases</u>, <u>books</u>, <u>and articles</u> or visit one of the <u>branch locations</u> for additional <u>resources</u>, <u>services</u>, <u>and study spaces</u>. Can't find what you are looking for? You can <u>Ask A Librarian</u> for help by email, chat, text, or phone. Ginessa Mahar is the Anthropology Librarian who can be reached at gjmahar@ufl.edu, office: Library West Room 500.

COURSE SCHEDULE

Date	Topic and Reading
8/22	Course mechanics, Approaches to anatomy (HEA: 1; HS: preface)
8/25	Anatomical terminology (<i>HEA</i> 2; <i>HS</i> : 215-218; <i>ACB</i> : 1-5; 21)
8/27	The vertebrate blueprint (<i>HEA</i> 3; <i>HS</i> : 3-15)
8/29	Axial skeleton (<i>HEA</i> 4; <i>HS</i> : 33-46; <i>ACB</i> : 19; 25-28)
9/1	Labor Day: No class
9/3	Basic wiring: spinal nerves (<i>HEA</i> 5; <i>HS</i> : 15-17, 22-23, 30-31, 47-56; <i>ACB</i> : 13; 68-69; 77; 81; 84-86)
9/5	Evolution of the no-brainer (<i>HEA</i> 6; <i>HS</i> : 19, 24-26)
9/8	Autonomic innervation (<i>HEA</i> 6; <i>HS</i> : 48-50, 127-128, 155-159, 203-205, 427-428; <i>ACB</i> : 91-93)
9/10	Cranial nerves (<i>HEA</i> 7; <i>HS</i> : 345-353; <i>ACB</i> : 83)
9/12	Examination I (150 points)
9/15	Body wall I: components (<i>HEA</i> 8; <i>HS</i> : 31-32, 57-61, 63-66; <i>ACB</i> : 9-16, 42-43)
9/17	Body wall II: the trunk (<i>HEA</i> 8; <i>HS</i> : 67-78; <i>ACB</i> : 47-51)
9/19	Aortic arches and cardinal veins (<i>HEA</i> 9; <i>HS</i> : 81-93, 140-151; <i>ACB</i> : 101-102)
9/22	Breathing air (<i>HEA</i> 10; <i>HS</i> : 115-126; <i>ACB</i> : 131-133)
9/24	Arterial circulation (<i>HEA</i> 11; <i>HS</i> : 75-76, 106-109, 176-177, 199-202, 241-245, 273-275, 295-298, 319-321, 369-370, 418-420, 425-427; <i>ACB</i> : 104, 106-114)
9/26	Venous drainage and lymphatics (<i>HEA</i> 12; <i>HS</i> : 110-114, 152-153, 177-179, 202-203, 245-246, 370-371; <i>ACB</i> : 115-120)
9/29	Embryology of the coelom (<i>HEA</i> 13; <i>HS</i> : 18-20)
10/1	The gut and mesenteries (<i>HEA</i> 13; <i>HS</i> : 133-140, 151-152; <i>ACB</i> : 134-143)
10/3	Urogenital embryology (<i>HEA</i> 14; <i>HS</i> : 160-179; <i>ACB</i> : 144-148; 155-160)

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10/6
             Pelvis and perineum (HEA 15; HS: 180-205; ACB: 51)
10/8
             Examination II (150 points)
10/10
             Head and neck embryology (HEA 16; HS: 341-345)
10/13
             The skull (HEA 17; HS: 356-369; ACB: 22-23, 129)
10/15
             Branchial muscles (HEA 18; HS: 402-412; ACB: 44-45)
10/17
             Homecoming: No class
10/20
             Special senses (HEA 19; HS: 374-386; ACB: 94-99)
10/22
             Functional anatomy of the neck (HEA 20; HS: 421-433; ACB: 46)
10/24
             Pharyngeal gut; anatomy of speech (HEA 20; HS: 387-418; ACB: 135, 137)
10/27
             Examination III (150 points)
             Pectoral limb: embryology and evolution (HEA 21; HS: 209-218; ACB: 87)
10/29
10/31
             Shoulder (HEA 22; HS: 219-236; ACB: 52-54)
11/3
             Arm (HEA 22; HS: 236-241; ACB: 55)
11/5
             Forearm (HEA 22; HS: 256-271; ACB: 56)
11/7
             Hand (HEA 22; HS: 248-256; ACB: 57)
11/10
             Examination IV (100 points)
11/12
             Pelvic limb: embryology and evolution (HEA 23; HS: 276-280; ACB: 88)
11/14
             Hip & Thigh (HEA 24; HS: 280-95; ACB: 59,60-62)
11/17
             Leg & Foot (HEA 24; HS: 299-319; ACB: 63-65)
11/19
             Evolution of bipedalism (HEA 25; HS: 322-338)
11/21
             Examination V (100 points)
11/24
             Thanksgiving recess: no class
11/26
             Thanksgiving recess: no class
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11/28 Thanksgiving recess: no class
12/1 Evolution and Comparative anatomy
12/3 Make-up Examinations

Final Examination is administered on Wednesday, 12/10/2025 from 10AM-12 Noon.