

Bioarchaeology of Children Workshop: July 7 – August 1, 2025

University of South Florida Course Numbers

ANT 4930 – Bioarchaeology of Children (3 credits)

ANT 4930 – Bioarchaeology in Transylvania (3 credits)

PROJECT DIRECTOR:

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Associate Professor

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LAB ASSISTANT:

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Workshop description:

The aim of this workshop is to provide participants with an intensive review of juvenile osteology and an overview of the ways in which this kind of unique information is interpreted by bioarchaeologists. During the workshop participants will have the chance to study the growth and development of the human skeleton across various juvenile age cohorts. Most importantly, participants will have the opportunity to gain experience with the analysis and interpretation of juvenile skeletal remains excavated from the several archaeological sites in Transylvania. The overarching goal is for participants to achieve a better understanding of how remains of juvenile individuals allow bioarchaeologists to better understand the past, particularly in this region of the Carpathian Basin.

Workshop participants will review adult osteology and receive lectures on juvenile skeletal biology. Seminars and class discussions will include such topics as an overview of the bioarchaeology of children, growth and development, weaning and dietary stress, juvenile trauma and pathology, and reconstruction infant mortality. Moreover, seminars and lectures will introduce how novel technological applications (i.e., histology, DNA analysis, etc.) have been utilized by bioarchaeologists who study juvenile remains. Various laboratory exercises will allow students to practice age estimation from both skeletal and dental indicators. Participants will also be introduced to basic ways in which juvenile skeletal pathology and taphonomy are described and recorded by bioarchaeologists. Finally, students will gain experience by analyzing and recording information from numerous juvenile skeletons and synthesizing these data for a presentation to be held on the last day of the workshop.

The skeletal collections that we will study are housed at the “Haaz Rezso” Museum in Odorheiu Secuiesc, Romania. These remains have been recovered from excavation projects conducted around this region of Transylvania. During the summer of 2025, we will concentrate our efforts on analyzing non-adult skeletons excavated from the collapsed medieval church located in the community of Patakfalva.

Nature of Instructional Activities:

Course material will be presented in lectures, discussions and hands-on exercises in the laboratory located in Odorheiu Secuiesc. The workshop will run from approximately 8:30AM – 5:00PM Monday to Friday. Typically, mornings will be reserved for lecture and hands-on instruction while afternoons will be dedicated to study time and skeletal analysis. A lunch break will be scheduled each day, along with breaks in the morning and afternoon. Participants should also expect to spend several hours per day after formal instruction concludes reviewing and studying the material. This is a fast-paced, intensive course but is an ideal environment for learning non-adult osteology and its relevance to the bioarchaeology of children.

Required Text:

Juvenile Osteology: A Laboratory and Field Manual. 2008. Maureen Schaefer, Sue Black, and Louise Scheuer. Academic Press.

Suggested Text

The Osteology of Infants and Children. 2005. Brenda J. Baker, Tosha L. Dupras, and Matthew W. Tocheri. Texas A&M University Press.

Required Readings:

Readings will be available electronically via Dropbox. In addition, an electronic library of references will be available for those wishing to expand their personal library.

Standard University Policies

Policies about disability access, religious observances, academic grievances, academic misconduct, academic continuity, food insecurity, and sexual harassment are governed by a central set of policies that apply to all classes at USF. These may be accessed at: <https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx>

STUDENT EVALUATION:

- ❖ **Bone Quizzes (20%)**
 - ◆ 6 bone quizzes will be administered during the first three weeks of the workshop and will include whole bones and/or fragments. The lowest quiz score will be dropped.
- ❖ **Annotated Bibliography (10%)**
 - ◆ Students will compile an annotated bibliography of five sources on a topic related to juvenile osteology or bioarchaeology.
- ❖ **Laboratory Projects (20%)**
 - ◆ Three projects will be assigned to give students practice estimating age-at-death from dental and skeletal indicators, and describing skeletal pathology.
- ❖ **Research Project and Final Presentation (20%)**
 - ◆ During the workshop, students will work in groups to complete a research project developed in consultation with the Project Director and Project Assistant. Each group will present their findings on the last day of the workshop.
- ❖ **Bioarchaeology Journal Club (10%)**
 - ◆ During the last week of the workshop, students will work in small groups to present and discuss published work focused on medieval bioarchaeology.
- ❖ **Participation (20%)**
 - ◆ Participation is calculated from overall performance in both laboratory and lecture/seminar contexts. **Students are encouraged to actively contribute to seminar discussions, engage their peers in a collegial manner, and present an overall collaborative attitude through the duration of the program.** In addition, students will work with the instructor to help facilitate discussion points related to several of the assigned reading(s).

Grading Scale A 100-90 B 89-80 C 79-70 D 69-60 F <59

Workshop Schedule

Week 1

Date	Lecture	Readings	Assignment and/or Assessment
7 July	Welcome and Orientation (Bio)archaeology of Children Pelvic Girdle	Scheuer and Black (2004): Chapter 1 Mays et al. (2017) Baxter (2008) Halcrow and Tayles (2011) Lewis (2012) Scheuer and Black (2004): Chapter 10	Pre-Test
8 July	Bone Development The Head and Neck I	Scheuer and Black (2004): Chapter 2 Scheuer and Black (2004): Chapter 10	
9 July	The Head and Neck II	Scheuer and Black (2004): Chapter 10	
10 July	The Dentition	Scheuer and Black (2004): Chapter 5	Bone Quiz 1 Lab Project #1 Assigned
11 July	The Vertebral Column	Scheuer and Black (2004): Chapter 6	Bone Quiz 2

Week 2

Date	Lecture	Readings	Assignment and/or Assessment
14 July	The Thorax The Pectoral Girdle	Scheuer and Black (2004): Chapter 7 Scheuer and Black (2004): Chapter 8	
15 July	The Upper Limb	Scheuer and Black (2004): Chapter 9	
16 July	The Lower Limb	Scheuer and Black (2004): Chapter 11	
17 July	Hand and Foot	Scheuer and Black (2004): Chapter 9 Chapter 11	Bone Quiz 3 Lab Project #2 A
18 July	Juvenile Skeletal Age Estimation	Algee-Hewitt (2013) AlQahtani et al. (2010) Cardoso et al. (2013) Shirley and Jantz (2010) Shirley and Jantz (2011)	Bone Quiz 4 Lab Project #3

Week 3

Date	Lecture	Readings	Assignment and/or Assessment
21 July	Reconstruction of Non-Adult Mortality	Lewis and Gowland (2007) Halcrow et al. (2008) Robbins (2011) Gilmore and Halcrow (2014)	
22 July	Juvenile Paleopathology	Wood et al. (1992) Ortner (2011) Smith (2013) Bennike et al. (2005) Djurcic et al. (2005) Richards and Anton (1991) Giuffra et al. (2013)	
23 July	Skeletal Trauma Analysis Juvenile Skeletal Trauma	Kroman and Symes (2013) Berryman et al. (2013) Walker et al. (1997) Glencross and Stuart-Macadam (2000) Wheeler et al. (2013) Mays (2014)	
24 July	Bone Healing and Interpretation	Cunha and Pinheiro (2009) Andrushko and Verano (2008) Merbs (2012)	Bone Quiz 5
25 July	Taphonomy	Gifford (1981) Marden et al. (2013) Guy et al. (1997)	Bone Quiz 6

Week 4

Date			Assignment and/or Assessment
28 July	Applications of Stable Isotope Analysis to Juvenile Bioarchaeological Questions	Tykot (2006) Dupras et al. (2001) Tung and Knudson (2010) Andrushko et al. (2011) Tsutaya and Yoneda (2013) Howcraft et al. (2014)	
29 July	Journal Club #1	Pitfield et al. (2019) Prieto et al. (2019) Rittemard et al. (2019) Maass (2022)	Annotated bibliography due
30 July	Journal Club #2	Geber (2014) Cardoso et al. (2019) Morrone et al. (2021) Riccomi et al. (2021)	
31 July	Wrap-Up/Workshop Summary		
1 August	Project Presentations		