



FRSC 550: Issues in Forensic Anthropology

Fall 2023

Room: Colgan Hall 203 (Science and Technology Campus)

Tuesday 4:30 pm – 7:10 pm

Instructor Information:

- Instructor: An-Di Yim
- Office location: Exploratory Hall 3407
- Office hours: Wednesday 10 am – 12 pm; Thursday 11 am – 1 pm; additional time by appointment.
- Email: ayim5@gmu.edu
- Communication policy: I **will** do my best to respond to emails as soon as possible between 9:00 am and 5:00 pm Monday through Friday. Usually, a response can be expected within 24 hours. I **will not** respond to emails late the night before the exam or before an assignment is due.
- Course management system: All course information is managed on Blackboard (<https://mymasonportal.gmu.edu/>)

Course Description: This course examines issues related to the recovery and analysis of human skeletal remains in a medicolegal context. Topics include detection and mapping approaches for human remains, assessment of biological information from the skeleton (such as sex, ancestry, age, and stature), and the analysis of skeletal trauma.

Required course materials:

PDFs of required journal articles and book excerpts will be available on the course website. The following book is helpful but not required:

Christensen, A. M., Passalacqua, N. V., & Bartelink, E. J. (2019). *Forensic Anthropology: Current Methods and Practice (2nd edition)*. Academic Press.

Some handouts of the lecture materials will be provided, however, as a lot of the materials are related to actual cases (actual human remains), lecture notes **will not** be made freely available.

Course Objectives: Upon completion of this course, students will be able to:

1. Understand the development, objectives, concepts, and limitations of forensic anthropology and its role in the medicolegal system.
2. Explain the concept of best practices and validated methods within forensic anthropology.
3. Explain the utility and principles of forensic archaeology.

- Apply methods in forensic anthropology to determine medicolegal significance of remains, estimate biological profile, analyze remains for taphonomy and trauma, establish a positive identity from antemortem and postmortem records, and communicate findings.

Basic Course Technology Requirements: Activities and assignments in this course will regularly use the Blackboard learning system, available at <https://mymason.gmu.edu>. Students are required to have regular, reliable access to a computer with an updated operating system (recommended: Windows 10 or Mac OSX 10.13 or higher) and a stable broadband Internet connection (cable modem, DSL, satellite broadband, etc., with a consistent 1.5 Mbps [megabits per second] download speed or higher. You can check your speed settings using the speed test on this website.)

Course Structure: This course will meet once weekly unless noted otherwise in the Course Schedule (see below). The course is structured as a graduate-level course. A typical class is divided into a one-hour lecture introducing the major themes and subjects, and a one and half hour discussion/laboratory session. You are expected to contribute to the class by participating in discussions and completing laboratory assignments. Asking questions during lectures is encouraged.

If the campus closes, or if a class meeting needs to be canceled or adjusted due to weather or other concern, students should check Blackboard and your email for updates on how to continue learning and for information about any changes to events or assignments.

Course Assessments

ATTENDANCE		25 pts
IN-CLASS ACTIVITIES		
CASE ANALYSIS NOTES	5*10 pts	50 pts
DISCUSSION PARTICIPATION		35 pts
DISCUSSION FACILITATION/QUESTIONS		15 pts
TOPICAL PAPERS	3*25 pts	75 pts
FINAL PRESENTATION		50 pts
TOTAL		250 pts

Attendance (10%): Because this is a small class, attendance is *mandatory*. However, I understand life happens, so you are allowed two absences, no questions asked. If possible, please let me know ahead of time if you will not be in class. Any additional absences will have an effect on your final grade unless they are accompanied by an acceptable excuse as defined by the university. Examples of acceptable excuses can be found in the Academic Policies section of the University Catalog: <https://catalog.gmu.edu/policies/academic/registration-attendance/>

In-class activities (40%): In-class activities include laboratory analysis of a mock case throughout the semester and discussions about the current issues in forensic anthropology. The following assignments stem from these activities will be graded:

- Case analysis notes (20%): For some weeks, we are going to work on one or more aspects of a mock forensic anthropology case. You are allowed to share and discuss information, however, all case notes must be individually authored. There are going to be five sets of analytical notes (sex estimation, age estimation, ancestry estimation, stature estimation and trauma/pathology/taphonomy, inventory and skeletal conditions). The due dates will be announced in class.
- Discussion facilitation and discussion questions (6%): At the beginning of the semester, a weekly topic will be randomly assigned to each student. Classroom discussion will be facilitated by one or two graduate students. For the week in which you facilitate discussion, you are also required to submit a set of questions/topics/talking points to enhance discussion and/or encourage debate. These will be due at the end of the classroom discussion.
- Discussion participation (14%): For some weeks, we are going to discuss pertinent issues in forensic anthropology. The topic and the assigned readings for the week are indicated on the syllabus. Classroom discussion is intended to explore the weekly readings, and everyone is expected to participate. Participation is demonstrated through active listening (not distracted by electronics or peers), raising informed discussion points, connecting discussion points to reading materials and/or relevant experiences.

Discussion participation rubric

7 pts	5 pts	3 pts	1 pts
Actively participating and contributing to discussion, arrive fully prepared to engage	Actively participating, arrive mostly prepared to engage	Limited interaction, limited preparation, engagement is inconsistent	No interaction, not prepared to engage, no participation

Topical paper and final presentation (50%): In lieu of the traditional exams, there are going to be two sets of assessments that serve to evaluate your progress:

- Topical papers (30%): Throughout the semester, you will be required to write a series of short papers reflecting on our discussions and/or evaluating of the topics presented in the lectures and required readings. In order to receive full credit, all topical papers must be between 1000-1500 words (about 1.5-2 single-spaced pages), Times New Roman font, size 12. These assignments are designed to 1) help you prepare for discussion, 2) help you make up for missed opportunities during in-class discussions, and 3) build and/or strengthen your writing abilities. The papers will be graded based on your critical thinking and writing skills. The grading rubric for the topical papers is available on Blackboard.

- Final presentation (20%): Traditionally, a forensic anthropology report is produced as the final outcome of any forensic anthropological analysis. It is arguably the most important aspect of performing forensic anthropology. However, because of the nature of this course, instead of a final forensic anthropology report, you will give a presentation on the mock case. For the presentation, you will be assessed on your choice and use of the methods as we have discussed during the course (as well as other scholarly sources as applicable). You are expected to include sections on the following (with photographic documentation as your deemed necessary): inventory of the remains, minimum number of Individuals, biological profile, taphonomy, and references. When applicable, you are expected to present on trauma, pathological conditions, and individualizing characteristics as well. More information will be available mid-semester.

Grading Policy

The university-wide system for grading graduate courses is as follows:

Grade	Quality Points	Graduate Courses	Percentage Earned
A+	4.00	Satisfactory/Passing	97-100+%
A	4.00	Satisfactory/Passing	92-96%
A-	3.67	Satisfactory/Passing	90-91%
B+	3.33	Satisfactory/Passing	87-89%
B	3.00	Satisfactory/Passing	82-86%
B-	2.67	Satisfactory/Passing	80-81%
C	2.00	Unsatisfactory/Passing	70-79%
F	0.00	Unsatisfactory/Failing	69% ↓

Late work: You are required to make up for any missing lab work within a week of your absence. For any two assignments, late work is accepted up to 24 hours after the due date. There will be no extensions or exceptions beyond this policy.

Feedback: Assignments will be graded in about a week from the day they are due.

Name and Pronouns Statement: If you wish, please share your name and gender pronouns with me and indicate how best to address you in class and via email. I use he/him/his for myself and you may address me as “Andi”, “Dr./Prof. Y”, or “Dr./Prof. Yim” in email and verbally.

Student Use of Electronic Devices: The use of laptop computers and/or tablet devices is encouraged in this class. We will also frequently be using the internet as a means to enhance our discussions. Please be respectful of your peers and your instructor and do not engage in activities that are unrelated to the class. Such disruptions show a lack of professionalism and may affect your participation grade.

University Policies

Academic Integrity: The integrity of the University community is affected by the individual choices made by each of us. As a Mason student, you should follow these fundamental principles at all times, as noted by the [Honor Code](#): (1) All work submitted should be your own, without the use in appropriate assistance or resources, as defined by the assignment or faculty member; (2) When you use the work, the words, the images, or the ideas of others--including fellow students, online sites or tools, or your own prior creations--you must give full credit through accurate citations; (3) In creating your work, you should not take materials you are not authorized to use, or falsely represent ideas or processes regarding your work. If you are uncertain about the ground rules or ethical expectations regarding the integrity of your work on a particular assignment or exam, you should ask your instructor for clarification. Support for you to complete your work is available; no grade is important enough to justify academic misconduct. Any student use of Generative-AI tools should follow the fundamental principles of the [Honor Code](#).

Disability Accommodations: Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit <http://ds.gmu.edu/> for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474

Diversity and Inclusion: I am committed to creating an inclusive classroom and facilitating sharing of diverse thoughts. The Forensic Science Program as a whole seeks to create a learning environment that fosters respect for people across identities. We welcome and value individuals and their differences, including gender expression and identity, race, economic status, sex, sexuality, ethnicity, national origin, first language, religion, age and ability. We encourage all members of the learning environment to engage with the material personally, but to also be open to exploring and learning from experiences different than their own. For university-wide policies, please see the [Mason Non-Discrimination Policy](#) and the [Mason Diversity Statement](#).

Sexual Harassment, Sexual Misconduct, and Interpersonal Violence:

George Mason University is committed to providing a learning, living and working environment that is free from discrimination and a campus that is free of sexual misconduct and other acts of interpersonal violence in order to promote community well-being and student success. We encourage students and employees who believe that they have been sexually harassed, sexually assaulted or subjected to sexual or interpersonal misconduct to seek assistance and support. [University Policy 1202: Sexual Harassment and Misconduct](#) speaks to the specifics of Mason's process, the resources, and the options available to students and employees.

As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, stalking, sexual exploitation, complicity, and retaliation to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-993-3686 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

Privacy: [Student privacy](#) is governed by the [Family Educational Rights and Privacy Act \(FERPA\)](#). Students must use their Mason email account to receive important University information, including communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

Course Schedule

Week	Date	Lecture	Lab/Discussion	Assigned readings
1	08/22	Course overview; Introduction; FA in the medicolegal system	Lab: skeletal elements and siding; Analysis overview	<ul style="list-style-type: none"> • Crowder, C. M., et al. (2016). <i>Academic forensic pathology</i>, 6(3), 349-360. • Christensen, A. M., et al. (2015). <i>Forensic science, medicine, and pathology</i>, 11, 438-441. • Passalacqua, N. V., et al. (2021). <i>Biology</i>, 10(8), 691.
2	08/29	Medicolegal significance; Method selection	<u>Discussion</u> : FA as a forensic science	<ul style="list-style-type: none"> • Christensen, A. M., et al. (2014). <i>Journal of forensic sciences</i>, 59(1), 123-126. • Ousley, S. D., & Hollinger, R. E. (2012). The pervasiveness of Daubert. In: <i>A companion to forensic anthropology</i>. • Boyd, D. C., & Boyd Jr, C. C. (2018). Forensic anthropology, scientific evidence, and the law: Why theory matters. In: <i>Forensic Anthropology: Theoretical Framework and Scientific Basis</i>.
3	09/05	Sex estimation TOPICAL PAPER 1 <u>DUE</u> : What is forensic anthropology?	Lab: sex estimation	<ul style="list-style-type: none"> • Sex Estimation. In: <i>Forensic Anthropology: Current Methods and Practice (2nd edition)</i> • Klales, A. R., et al. (2012). <i>American journal of physical anthropology</i>, 149(1), 104-114. • Walker, P. L. (2008). <i>American Journal of Physical Anthropology</i>, 136(1), 39-50. • MoprhoPASSE User Manual

Week	Date	Lecture	Lab/Discussion	Assigned readings
4	09/12	Age estimation	Lab: age estimation	<ul style="list-style-type: none"> • Age Estimation. In: <i>Forensic Anthropology: Current Methods and Practice (2nd edition)</i> • Langley-Shirley, N., & Jantz, R. L. (2010). <i>Journal of forensic sciences</i>, 55(3), 571-583. • Brooks, S., & Suchey, J. M. (1990). <i>Human evolution</i>, 5, 227-238. • Hartnett, K. M. (2010). <i>Journal of forensic sciences</i>, 55(5), 1145-1151. • Işcan, M. Y., et al. (1984). <i>Journal of forensic sciences</i>, 29(4), 1094-1104. • Hartnett, K. M. (2010). <i>Journal of forensic sciences</i>, 55(5), 1152-1156.
5	09/19	Ancestry estimation	Lab: ancestry estimation	<ul style="list-style-type: none"> • Ousley, S. D., & Jantz, R. L. (2012). In: <i>A companion to forensic anthropology</i>, 311-329. • Hefner, J. T. (2009). <i>Journal of forensic sciences</i>, 54(5), 985-995. • Hefner, J. T. (2018). <i>American Journal of Physical Anthropology</i>, 166(4), 994-1004. • MMS User Manual • Fordisc Help File
6	09/26	Stature estimation	Lab: stature estimation; biological profile analysis wrap-up	<ul style="list-style-type: none"> • Standard for Stature Estimation in Forensic Anthropology • Ousley, S. (1995). <i>Journal of Forensic Sciences</i>, 40(5), 768-773. • Jantz, L. M., & Jantz, R. L. (1999). <i>American Journal of Physical Anthropology</i>, 110(1), 57-67. • Ruff, C. B., et al. (2019). <i>American journal of physical anthropology</i>, 168(2), 370-377.

Week	Date	Lecture	Lab/Discussion	Assigned readings
7	10/03	<p>Analytical notes; FA reports; Introduction to taphonomy</p> <p>TOPICAL PAPER 2 <u>DUE</u>: Biological profile methods and considerations</p>	<p>Lab: skeletal processing methods <u>Discussion</u>: issues in sex estimation</p>	<ul style="list-style-type: none"> Best, K. C., et al. (2018). <i>Journal of forensic sciences</i>, 63(4), 990-1000. Garvin, H. M., et al. (2014). <i>American journal of physical anthropology</i>, 154(2), 259-269. Klales, A. R. (2016). <i>Journal of Forensic Sciences</i>, 61(2), 295-301. Nakhaeizadeh, S., et al. (2014). <i>Science & Justice</i>, 54(3), 208-214.
8	10/10	NO CLASS		
9	10/17	Taphonomy (cont'd)	<p><u>Discussion</u>: issues in age estimation</p> <p>CASE ASSIGNED</p>	<ul style="list-style-type: none"> Garvin, H. M., & Passalacqua, N. V. (2012). <i>Journal of Forensic Sciences</i>, 57(2), 427-433. Konigsberg, L. W., et al. (2008). <i>Journal of forensic sciences</i>, 53(3), 541-557. Shirley, N. R., & Ramirez Montes, P. A. (2015). <i>Journal of forensic sciences</i>, 60(1), 107-111.
10	10/24	Trauma, pathology, skeletal anomaly	Lab: trauma, pathology, skeletal anomaly, taphonomy	<ul style="list-style-type: none"> Berryman, H. E., et al. (2018). Bone trauma analysis in a forensic setting: Theoretical basis and a practical approach for evaluation. In: <i>Forensic anthropology: theoretical framework and scientific basis</i>. Symes, S. A., et al. (2012). Interpreting traumatic injury to bone in medicolegal investigations. In: <i>A companion to forensic anthropology</i>. Ortner, D. J. (2011). Differential diagnosis and issues in disease classification. In: <i>A companion to paleopathology</i>. Nomenclature in Paleopathology

Week	Date	Lecture	Lab/Discussion	Assigned readings
11	10/31	Forensic archaeology	<u>Discussion</u> : issues in ancestry estimation	<ul style="list-style-type: none"> • Fuentes, A., et al. (2019). <i>American Journal of Physical Anthropology</i>, 169(3), 400-402. • DiGangi, E. A., & Bethard, J. D. (2021). <i>American Journal of Physical Anthropology</i>, 175(2), 422-436. • Dudzik, B., & Jantz, R. L. (2016). <i>Journal of Forensic Sciences</i>, 61(5), 1311-1318. • Kamnikar, K. R., et al. (2018). <i>Journal of forensic sciences</i>, 63(2), 361-370.
12	11/07		Lab: field recovery	
13	11/14	<p>Individual skeletal variation; Personal identification; applications of FA</p> <p>TOPICAL PAPER 3 <u>DUE</u>: Issues in forensic anthropology</p>	<u>Discussion</u> : issues in taphonomic research	<ul style="list-style-type: none"> • Bates, L. N., & Wescott, D. J. (2016). <i>Forensic science international</i>, 261, 93-100. • Dabbs, G. R. (2015). <i>Journal of forensic sciences</i>, 60(3), 581-587. • Schwarcz, H. P., Agur, K., & Jantz, L. M. (2010). <i>Journal of forensic sciences</i>, 55(6), 1516-1522. • Wescott, D. J., et al. (2018). <i>Forensic Anthropology</i>, 1(3), 143-149. • Damann, F. E., et al. (2015). <i>Journal of forensic sciences</i>, 60(4), 844-850.
14	11/21	NO CLASS		
15	11/28	FINAL CASE PRESENTATION		