Anthropology 412
Human Osteology

Instructor
Dr. Corey Ragsdale
Office: Social Sciences Room 217
E-mail: corey.ragsdale@umontana.edu
Office hours: Monday and Wednesday 1:00-2:30 pm, and by appointment.

Course Objectives:
This course will familiarize students with the anatomy of the human skeleton. This includes a basic understanding of the biology and chemistry of bone and teeth, growth and development, and changes to bones and teeth through genetic and environmental processes. An important element of this course includes how physical anthropologists collect, analyze, and interpret data using the human skeletal system.

Readings


Optional/Recommended Reading

Moodle and e-mail. Course materials will be posted on Moodle (http://umonline.umt.edu). Students are responsible for accessing these materials regularly. I will communicate with the class during the term via e-mail. All students are required to have a UM e-mail account and to check it regularly. Please do not hesitate to e-mail us with questions or comments during the term.

Grading
Course grades will be calculated in the following way:
Quizzes (x5): 40%
Midterm Exams (x2): 40%
Final Exam: 20%
NOTE: attendance of the laboratory sessions is an extremely important part of the class. Life happens, and occasionally labs cannot be attended. However, it is unlikely life happens on a regular basis. Make-ups for quizzes exams are possible only under extenuating circumstances accompanied by written documentation.

The midterm and final exams will include practical, short answer, and/or multiple-choice components. The written components will be weighted heavily towards material presented in the lectures and readings. Quizzes will be practical.

**General policies**

1. Attendance is required.

2. All students must attend the three exams. Make-up exams will only be allowed with a valid written medical excuse.

3. Qualified students with disabilities needing appropriate academic adjustments should contact the Disability Services for Students (DSS). “Reasonable” means the University permits no fundamental alterations of academic standards or retroactive modifications. (For other options see http://www.umt.edu/disability).

4. Academic dishonesty will be dealt with in accordance with university policies.
   - **Cheating** on exams will result in an F in the course.
   - **Plagiarism** is a form of cheating. It is defined in the Macmillan Dictionary as “the process of taking another person’s work, ideas, or words, and using them as if they were your own.” If you plagiarize any assignment, you will receive a zero for the assignment and an F in the course. We are experts at detecting plagiarism.

5. Students must retain all material distributed in class and online. It is especially important that students retain all graded assignments. If a student has a grade dispute, he/she will be required to produce the disputed graded assignment(s).

**Lab Hours**

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<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Preceptors</th>
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<tbody>
<tr>
<td>Monday</td>
<td>4:00 to 5:00 pm</td>
<td>Erin Michalak</td>
</tr>
<tr>
<td>Tuesday</td>
<td>9:00 am to 12:00 pm</td>
<td>Brittney Eubank, Ariane Thomas</td>
</tr>
<tr>
<td>Wednesday</td>
<td>4:00 to 5:00 pm</td>
<td>Erin Michalak</td>
</tr>
<tr>
<td>Thursday</td>
<td>9:00 am to 12:00 pm</td>
<td>Julia Schorr, Ariane Thomas</td>
</tr>
<tr>
<td>Friday</td>
<td>11:00 am to 1:00 pm</td>
<td>Megan Richardson</td>
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Course Schedule

Week 1 (8/31-9/4): Introduction to the Course
   Overview of Anatomical Terms and Motions
   • TEXT: Chapters 1 and 3

Week 2 (9/7-9/11): NO CLASS 9/7 LABOR DAY
   Skeletal Microstructure and Growth
   Skeletal Microstructure and Growth (continued)
   • Quiz 1: Anatomical Terms/Motions (TUESDAY 9/9)
   • Readings: Kerley, "The microscopic determination of age in human bone"
   • TEXT: Chapter 2

Week 3 (9/14-9/18): Ethics in Osteology
   NO CLASS 9/16*
   The Skull
   • TEXT: Chapters 16 and 4

Week 4 (9/21-9/25): Skull (cont.)
   Dentition
   • TEXT: Chapters 4 (cont.) and 5
   • Quiz 2: The Skull –part one- (MONDAY 9/28)

Week 5 (9/28-10/2): Vertebrae and Thorax
   Shoulder Girdle
   • TEXT: Chapters 6, 7, and 8

Week 6 (10/5-10/9): The Arm
   Review for Exam #1
   • Midterm Exam # 1 (FRIDAY 10/9)
   • TEXT: Chapter 9

Week 7 (10/12-10/16): The Hand
   The Pelvis
   • TEXT: Chapters 10 and 11

Week 8 (10/19-10/23): The Leg
   The Foot
   • Quiz 3: The Pelvis (MONDAY 10/19)
   • TEXT: Chapters 12 and 13

Week 9 (10/26-10/30): The Foot (cont.)
   Review for Exam #2
   • Midterm Exam #2 (FRIDAY 10/30)
   • TEXT: Chapter 13 (cont.)
Week 10 (11/2-11/6): Determination of Age
Determination of Sex
Determination of Stature
- Sutter, “Nonmetric Subadult Skeletal Sexing Traits: A Blind Test of the Accuracy of Eight Previously Proposed Methods Using Prehistoric Known-Sex Mummies from Northern Chile”
- Auerbach and Ruff, “Stature estimation formulae for indigenous North American populations”
- TEXT: Chapter 17, 17.1-17.5

NO CLASS 11/11 VETERAN’S DAY
Craniometrics
- Quiz 4: Determination of Age and Sex (MONDAY 11/9)
- Hefner, “Cranial Nonmetric Variation and Estimating Ancestry”
- TEXT: Chapter 17, 17.6

Week 12 (11/16-11/20): Paleopathology
- TEXT: Chapter 18 and 20, 20.3-20.4

Week 13 (11/23-11/27): Dental Anthropology
NO CLASS 11/25-11/27: THANKSGIVING BREAK
- Hillson, “Dental Anthropology”.

Week 14 (11/30-12/4): Forensic Anthropology
Bioarchaeology
Film: Written in Bone (FRIDAY 12/4)
- Quiz 5: Dental Anthropology (MONDAY 11/30)
- Buikstra, "Out of the Appendix and into the dirt"
- Ubelaker, "Skeletons testify: Anthropology in forensic science"
- TEXT: Case Studies from Chapters 22-25

Week 15 (12/7-12/11): Processing and Curating Human Remains
Review for Final Exam
- FINAL EXAM TBD

*This schedule is subject to change, and may be adjusted as the term progresses.*