

# **Palaeopathology**

*ANTHROPOLOGY 3PP3 - Winter Semester 2017*

**Instructor: Dr. Andrew Wade**

**Email: wadeand@mcmaster.ca**

**Course Location: Chester New Hall 407**

**Course Time: Wednesdays 2:30 – 5:20 PM**

**Instructor Office Location: CNH 515**

**Office Phone: 905-525-9140 x23916**

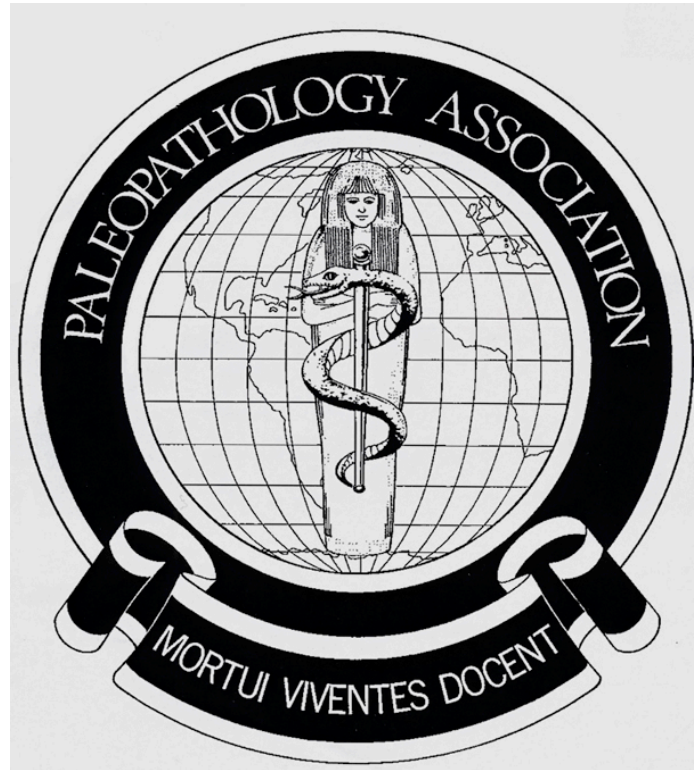
**Instructor Office Hours: Mondays 11AM – 12PM**

**Thursdays 1 – 2PM**

**TA Office Hours & Location: TBA**

**Required Texts:**

- **Roberts C, Manchester K. 2013. The Archaeology of Disease. (Avail. for Kindle)**
- **White TD, Folkens PA. 2005. The Human Bone Manual. OR equivalent skeletal atlas**



Palaeopathology is the study of ancient diseases and their origins, and provides clinical researchers with a time depth not possible in clinical research. The focus of the course will be archaeological human remains and interpretations of past human health through their study. Readings for the course will also include current clinical literature to enable a bioarchaeological approach to be taken to the interpretation of past human health. The combined lecture and laboratory format gives the student a comprehensive overview of the pathological processes of bone and enamel as well as experience with the methods used recording the pathology of skeletal remains.

If I have done my part in this course, and you yours, you will come away able to:

- Discriminate between pathological lesions and normal anatomical variability in skeletal and dental remains
- Communicate findings of pathological lesions using clinical terminology
- Classify diseases accessible through skeletal and dental remains
- Evaluate the physical changes that occur in bone and enamel in response to different diseases and forms of trauma
- Perform differential diagnoses of skeletal lesions and present the supporting analyses

### Academic Accommodations

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs. *Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail [sas@mcmaster.ca](mailto:sas@mcmaster.ca). For further information, consult McMaster University's Policy for [Academic Accommodation of Students with Disabilities](#).*

Occasionally, illness or other medical issues make it impossible to meet deadlines or to take exams as scheduled. Students are responsible for arranging assignment extensions and make-up exams with the instructor as soon as possible.

### MSAF

The MSAF should be used for medical and non-medical (personal) situations.

Approval of the MSAF is automatic (i.e. no documentation required)

Rules governing the MSAF are as follows:

- The timeframe within which the MSAF is valid has been reduced from 5 days to 3 days.
- The upper limit for when an MSAF can be submitted has been reduced from 'less than 30%' to 'less than 25%' of the course weight.
- The 'one MSAF per term' limit is retained.
- As per the policy, an automated email will be sent to the course instructor, who will determine the appropriate relief. Students must immediately follow up with their instructors. Failure to do so may negate their relief.

Policy: The MSAF policy can be found in the Undergraduate Calendar under General Academic Regulations & Requests for Relief for Missed Academic Term Work or here:

[http://academiccalendars.romcmaster.ca/content.php?catoid=11&navoid=1698#Requests\\_for\\_Relief\\_for\\_Missed\\_Academic\\_Term\\_Work](http://academiccalendars.romcmaster.ca/content.php?catoid=11&navoid=1698#Requests_for_Relief_for_Missed_Academic_Term_Work)

*All other late assignments will be penalized at a rate of 10% per day. Late assignments will not be accepted after 7 days beyond the original deadline without appropriate documentation from the Office of the Associate Dean of Social Sciences.*

### Academic Integrity (<http://www.mcmaster.ca/policy/Students-AcademicStudies>)

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located on the website above.

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g., the submission of work that is not one's own for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

### Correspondence

Most questions can and should be asked in class or during office hours. However, if you have a quick question or comment and need to email me, please feel free to do so. I check my email regularly throughout the week, so you can expect a response within **~48 hours**. Please put **3PP3 in the subject line** of your email and **include your name and student number** at the end of all correspondence. I cannot respond to lengthy questions over email but will be happy to discuss them in person. If office hours conflict with your schedule please let me know and we can make other arrangements. If an emailed question is relevant to the rest of the class, I will post a response on Avenue or discuss it in the next class. Feel free to post questions relevant to course content in the discussion forum of the course web site.

### Faculty of Social Sciences E-mail Communication Policy

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all e-mail communication sent from students to instructors (including TAs), and from students to staff, must originate from the student's own McMaster University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion.

Email Forwarding in MUGSI: <http://www.mcmaster.ca/uts/support/email/emailforward.html>

\*Forwarding will take effect 24-hours after students complete the process at the above link

(Approved at the Faculty of Social Sciences meeting on Tues. May 25, 2010)

**If you require this information in an alternate/accessible format, please contact Delia Hutchinson at [905-525-9140 extension 24523](tel:905-525-9140) or email [hutchin@mcmaster.ca](mailto:hutchin@mcmaster.ca)**

### Avenue To Learn

In this course we will be using Avenue to Learn (<http://avenue.mcmaster.ca>). Log in, using your MacID and password, to connect to course content such as this syllabus, lecture overviews, announcements, interesting links, etc. Additionally, you will be able to access the lecture PPTs through Avenue.

Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

### Use of Electronic Devices (including laptops):

No electronic devices of any kind (including but not limited to cell phones, Blackberries, iPods, other MP3 players, voice recorders, etc.) will be allowed during examinations. Laptops and other data devices may only be used during lectures for note taking or other course-related purposes. *Disruptive use of electronic devices during class time may result in a request that you leave the classroom.*

### Marking Scheme

**Midterm Exam** [20%]

**Practical Quizzes** [4x5%]

**Poster Assignment** [30%]

**Final Take-home Exam** [30%]

## Assignments

### **Midterm exam [20%]**

The midterm exam will consist of written comprehension, short-answer, and pictorial questions related to material from the lectures, labs, and independent reading.

### **Poster Assignment [30%]**

Each of you will sign up for a skeletal element (or small group of elements) that has some kind of pathological or traumatic change. Basic information on the geographical and temporal origin of the material will be provided. You are required to provide a **biocultural analysis** and a **differential diagnosis** for the lesions recorded. Information on the methods used and findings should be **presented as a poster (single-slide Powerpoint)** that could be presented at a meeting of organizations such as CAPA or the PPA. You will **briefly present your findings (~5 min) and answer questions** from the class on March 3<sup>rd</sup>. Each of you will be expected to **ask at least two questions** regarding the methods and findings presented that day. A digital copy of the poster must also be submitted on Avenue to Learn by the end of the day.

### **“Is It Pathological?” Quizzes [4x5%]**

Deciding if a bone is damaged due to taphonomic processes, is within the range of normal variability, or is pathological can be one of the hardest parts of paleopathology. In these practical quizzes you will have to determine if an item is simply damaged post-mortem, if it is normal, or if it is pathological. For those you consider pathological, **basic information must be provided on the changes** you note. Standardised terminology lists will be provided to ensure consistent, unambiguous description of the changes.

### **Final Take-home Exam [30%]**

The final exam will be based on all in-class work, lectures, labs, discussions, and assigned readings. It will consist of a series of essay questions. The exam will be handed out on March 31<sup>st</sup> and your work must be submitted on Avenue to Learn by **noon on April 12th**.

**The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check his/her McMaster email and course websites weekly during the term and to note any changes.**

<b>Week</b>	<b>Lecture</b>	<b>Due Dates</b>	<b>Readings (R&amp;M Chapters)</b>
Jan 4	Introduction Review of the Skeleton & Bone Biology		**Wood et al, 1992
Jan 11	History of Palaeopathology Theory & Practice of Disease Analysis	<b>Poster Specimens</b>	1 & 2
Jan 18	Congenital Disease Dental Disease	<b>Quiz 1</b>	3 & 4
Jan 25	Trauma		5 **Wheeler et al, 2013
Feb 1	Metabolic & Endocrine Disease	<b>Quiz 2</b>	8
Feb 8	Joint Disease		6
Feb 5	<b>Midterm Exam</b>		
Feb 22	<b>READING WEEK – NO CLASS</b>		
Mar 1	Infectious Disease Non-specific Changes	<b>Quiz 3</b>	7 **Weston, 2008
Mar 8	Neoplastic Disease		9
Mar 15	Future of Palaeopathology Non-Human Pathology	<b>Quiz 4</b>	10
Mar 22	Open Lab Time for Pathology Specimen Analyses		
Mar 29	Exam Information Pathology Collection Tour		
Apr 5	<b>Poster Presentations</b>	<b>Poster Due</b>	
<i>Apr. 10-29</i>	<b>FINAL EXAM</b>		

\*\*Articles not in Roberts & Manchester:

Wood JW, Milner GR, Harpending HC, Weiss KM. 1992. The osteological paradox: Problems of inferring prehistoric health from skeletal samples. *Current Anthropology* 33(4):343-370.

Wheeler SM, Williams L, Beauchesne P, Dupras TL. 2013. Shattered lives and broken childhoods: Evidence of physical child abuse in ancient Egypt. *International Journal of Paleopathology* 3:71-82.

Weston DA. 2008. Investigating the specificity of periosteal reactions in pathology museum specimens. *American Journal of Physical Anthropology* 137:48-59.