Anthropology 9112A/4493F
“i”-ing the Past: Digital Archaeology and Digital Heritage
Fall 2017

Mondays 1:30-4:30, Rm: SSC 3315

Instructor: Dr. Neal Ferris
Office: SSC 3215
Email: nferris@uwo.ca
Office Hours: Mon. 9:30-1:00

Please note that I am cross appointed with the Museum of Ontario Archaeology, and work over at Sustainable Archaeology other days during the week (1600 Attawandaron Road off of Wonderland near Fanshawe Park Road). So if you need to meet with me other than Mondays during office hours or after class, please email me to see if we can schedule a time to meet at the Museum, or, if mutually convenient, in the department.

Welcome... an Introduction
This course will explore the implications of digitizing the practice of archaeology, and interacting with the past digitally. What are the possibilities and issues when a material, tangible past is interacted with and “handled” intangibly and online? What does it mean for archaeological datasets to be “borne digitally”? How does this digital world change methodologies, analyses, and even how we interpret and think about the archaeological heritage? What are the implications for understanding the past and making the archaeological heritage accessible beyond archaeology, as it becomes engaged with, challenged, and re-imagined online and within social media and a global digital community?

The intent of this course is to understand the implications of a digital archaeology, and of a digital heritage arising from that archaeology. It is NOT a how-to course, and digital novices as well as seasoned veterans should easily manage the expectations for this course, including the hands-on experiences using digital equipment.

PLEASE NOTE: This is a cross listed, graduate/undergraduate course. To reflect that difference, graduate students will be expected to undertake additional assignments, and the value of some assignments will differ. As this is both a graduate student course and advanced topics course for undergraduates, the course will operate as a discussion seminar, combined with presentations and an open conversation. So your participation in discussions, questions you ask of me or whoever is presenting that day, etc., will all
contribute to your participation mark. But also, keep in mind that a course on Digital Archaeology is rather open ended... easier to define what it is not than what it is. So to make this work you need to come to class prepared with questions and observations about the day’s readings and focus. This is a dialogue we’ll be having, NOT a text thread or me talking and you liking or not. Mutual participation will make the class more dynamic, and end up being reflected in the final mark you receive!

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

1) Synthesize the history of how digital technologies have been used in archaeology, and the unique opportunities those technologies provide for research;

2) Communicate the implications of an archaeology made digital, as a science, as a social media, and as a heritage consumed online, based on your exploration of what making archaeology and heritage digital encompasses, and as part of social media expectations for the course;

3) Synthesize the key issues and debates inherent in digitizing archaeology, from issues of accuracy, authenticity, and authority in presentation; challenges of making meaning from “big data”; negotiating cultural intellectual property issues inherent in 3D models, immersive environments, and 3D printing; potential of gaming, AR and VR as cultural heritage learning and empathy; and alternate archaeologies arising from re-purposing digital data;

4) Identify the limitations and real risks involved in embracing an archaeological heritage dependent on hardware and software that are so transitory and so quickly become obsolete in a profession whose aim in part is to preserve the record of the past;

5) Apply the principles of an informed and reflexive digital archaeology through hands-on use of digital technologies and media that can preserve, convey or re-imagine the archaeological record as heritage.

Course Evaluation:
Relevant dates and the weighting of each assessed component are as follows (There is NO final exam):

<table>
<thead>
<tr>
<th>Assessed Component of Final Grade</th>
<th>Page Length/# Undergraduates</th>
<th>Page Length/# Graduates</th>
<th>Due Date</th>
<th>Percent of Final Grade Undergraduate</th>
<th>Percent of Final Grade Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>na</td>
<td>na</td>
<td>ongoing</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Contributions to Class blog</th>
<th>Min. 1 blog; Min. 3 comments</th>
<th>Minimum 3 blogs; Min. 3 comments</th>
<th>ongoing</th>
<th>10%</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeology Communicating Across Social Media</td>
<td>3-4</td>
<td>NA</td>
<td>Sept. 25</td>
<td>15%</td>
<td>na</td>
</tr>
<tr>
<td>Webpage reviews – Fantastical/Alternative archaeology pages</td>
<td>3-4; based on 2 websites or equivalents</td>
<td>3-4; based on 3 websites or equivalents</td>
<td>ongoing presentations from October on (email selections by Sept 25)</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Leading Class in Readings Discussion</td>
<td>na</td>
<td>Add’l readings due 1 wk before</td>
<td>ongoing</td>
<td>na</td>
<td>15%</td>
</tr>
<tr>
<td>Digital Archaeology Project</td>
<td>5-6</td>
<td>5-6</td>
<td>Topic chosen by start of Fall reading week; Presentations on November 13th</td>
<td>20%</td>
<td>25%</td>
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<tr>
<td>Final Paper/Project</td>
<td></td>
<td></td>
<td>Proposal: Oct 30th; Deadline: Dec 10 (undergraduate); Dec 31 (grad)</td>
<td>30%</td>
<td>25%</td>
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**Submitting Assignments:** My preference is NOT to receive hard copies of your assignments. I will accept assignments emailed to me as Word (.doc or docx) or Google docs files.

1. **Class Participation (10% for all):** This mark will be based on your engagement in class discussions, and in discussing presentations by others in the class. I will expect your ability to participate and help shape the direction we follow in class to reflect whether you are an undergraduate, MA, or PhD student.

2. **Blogging Digital Archaeology (10% undergraduate, 15% graduate):** I have a blog page set up for this course. All undergraduate students are expected to contribute at least one blog to the page, and graduate students at least 3 blogs, at some point over the duration of the course. I also expect everyone to comment on other posts a minimum of 3 times over the duration of the course. These posts can be on any or all of the subject of the most recent class, readings for an upcoming class, in-class presentations, preparing for a presentation, something you tripped across online, something from another course you
want to raise as relevant, my tendencies and foibles or those of classmates, or whatever happens to be on your mind and can fall somewhere, somehow within the box of a “digital archaeology/heritage.” You need to discuss the topic in a coherent, reflexive way for the post to count (you are welcome to just post humour or link without comment, but those won’t count to your posts). You are also free to exceed minimums, if you’d like. Commentaries don’t have to be long, don’t have to follow formal paper or citation requirements, but should be written to either convey opinion or information, or share, link, or comment on something you found of relevance. And of course all posts and comments need to be respectful of each other’s perspective. I will remind everyone a couple of times to participate in the blog, but I expect you to make it a regular part of your course prep, in part because I will only be using a bare bones OWL site for this course, and instead will use the course blog to include course announcements and other info!

The address for the blog is: http://i-ingthepastarch.blogspot.ca/ I will leave a few entries up from earlier courses, to give you a sense of the range and nature of posts that worked before, and will ensure it is updated before first class. NOTE: that I will need your email addresses to allow you to contribute to the blog.

3. Assignment: Archaeology Communicating Across Social Media (15% Undergraduate Students ONLY): Undergraduates will generate a brief report, due September 25th, on how archaeology is communicated across social media. This report is to be an analysis on how archaeology is portrayed, and how people engage with that portrayal. I would like you to choose one of Facebook or Twitter, and search the string: “Archaeology Discovery.” Then review the range of articles, posts, pictures, comments, etc. that appear over a week from Public Posts/Tweets. There should be plenty to play with, so part of the assignment is for you to figure out how to manage the data. I want you to analyse the messaging of the posts, especially how archaeology tends to be conveyed, and how people in commentaries respond to the posts; i.e., positive or negative, science or history, personal or institutional, etc. I also want you to find a way to summarize the data you’ve assembled (how many are from news services, blogs, etc., how many shares/re-tweets, comments, likes, etc.). Then write a brief (3-4 pages) assessment of your impressions undertaking the study... do not summarize posts/tweets... and your assessment of what the principal and secondary messaging/emotional sense of what archaeology appears to be from your dataset.

4. Assignment: Websites review (Undergraduate students 15%; Graduate students 10%): The one certainty in the topic of digital archaeology is that there is an endless supply of web pages, blogs, twitter feeds, etc., from which to explore the topic. The other certainty is that, in an age where facts and “the truth” are just someone else’s opinion, readily filtered out from personal exposure through simple “featured” or “similar posts for you” algorithms, ALL understandings of the past, no matter how fantastical, is accommodated online and consumed by like minded audiences. Likewise, there are endless blogs, posts or pages devoted to debunking those opinions. In this assignment, students
will review web sites (2 for undergraduates, 3 for graduates; note that I will consider Reddit topics or Instagram accounts if there is enough to critically evaluate) that share a common theme under a broader, fantastical archaeology framework. These can be relatively benign viewpoints, such as from metal detectors or artifact collectors, and their assertion that they are legitimate researchers, to pages devoted to beliefs of aliens, giants, or alternative explanations of archaeological phenomenon or heritage values, to conspiracy-driven refutations of archaeological “proof.” Note: For this exercise we are not exploring heritage-based interpretations of the past by communities arising from oral traditions, or written document records that refute archaeology on the basis of historical record accuracies.

Your task will be first to come up with websites. My preference is that your websites reflect a common theme that “makes sense” and links the pages somehow. You then will need to CRITICALLY EVALUATE how these pages engage with the online world: who do they imagine their audiences to be vs who their audience actually is; what is their stated messaging vs unintended messaging; Do they facilitate discussion and research, assert a clear agenda, or just provide interesting/promotional pages. I am looking here for a critical analysis of content and messaging, within the context of what we are talking about in class discussions. I am NOT looking for you to evaluate the general usability or appearance of the web pages, or summarise their content. So you are less analysing the content, and more the intent behind the content. More importantly, you need to select web pages that will best serve your critical analysis, so thinking through your choices and how they compare to the other pages you are evaluating is an important part of the assignment.

Everyone will need to research and select the pages they will be presenting on, and email me of their choices by September 25th, explaining what it is about the pages you want to focus on. Presentations will begin starting the following class and be scheduled into classes (1 or 2 a class) for the remainder of the course. Presentations should be 15-20 minutes long, followed by a class discussion. You will need to generate a PowerPoint/Prezi or other form of presentation of the pages and points you wish to highlight (you can go “live” to the page as well, but embed the URLs into the presentation, to help order your presentation, rather than working solely from the web browser). Following your presentation, you will need to submit a short written report (3-4 pages) by the following week. The written component MUST not summarise your presentation. Rather it should evaluate the main issues that came to light in your review AND in the class discussion, and provide your assessment of these issues.

5. Leading Class Discussion on Readings (15% graduate students ONLY): Over the duration of the course, graduate students will be expected to each choose a scheduled topic for a week’s class discussion, provide the class with 1-2 additional readings selected to explore dimensions of the topic
[you MUST use scholarly sources or critical blogs, and they must not have been previously assigned to the course], and then you will present on the readings/lead the class in discussion. You will be expected to generate a presentation (Powerpoint, Prezi, video, etc.) on the key themes related to the topic that have arisen from the readings, in order to start the class discussion off from there. Your introduction to the readings cannot be a summary of the articles themselves... rather you are expected to draw out key themes the readings collectively raise. Your introductory presentation should be no more than about 20 minutes long. Feel free to bring in additional information, case studies, video clips, structure your presentation as a debate, bring in cookies or prizes to get people talking (!), etc., to beef up your discussion of the topic. You’ll be marked on your presentation, your choice of additional readings, your ability to flag key issues, your ability to generate discussion, and your ability to help lead in that class discussion. Much of the literature for these topics is available, not surprisingly, online, so make sure your additional readings are accessible online.

The only way for your discussion to be effective is if everyone reads the assigned readings for the class. That means you must have those readings posted and available a week BEFORE your class. Students will begin leading class discussions by September 25th.

Also, depending the size of the class we may break up the class discussion between two students for some classes, who would then each focus on distinct dimensions of the readings.

6. Digital Project (20% undergraduate; 25% graduate): This project will consist of students doing “something” digital archaeology related. I want to shape this as much as possible around your interests and abilities, and resources available to us. We will discuss the options in the first class. Options can include: a) Developing an app concept for a smart phone or tablet that delivers a digital archaeology need (e.g., for inspiration see http://arch-pad.blogspot.ca/). There are several apps for making mock-ups, such as the free POP app (https://popapp.in/), to more complex design programs that provide you with the ability to develop working wireframes, such as Balsamiq (http://www.balsamiq.com/). b) Working at Sustainable Archaeology using our equipment to create a 3D model of an artifact or of a 3D full colour print of a to-scale or scaled up version of an artifact (www.sustainablearchaeology.ca). c) Developing a proposal for a geo-referenced Augmented Reality-based exhibit or interaction for visitors going to the Museum of Ontario Archaeology (you know, like Pokemon Go: see https://www.theguardian.com/technology/2017/aug/30/ar-augmented-reality-apple-google-smartphone-ikea-pokemon-go), and develop a preliminary “Aura” through Aurasma (https://www.aurasma.com/). D) Work with SA staff to help shape the way we deliver online 3D models mesh free (https://bloomce.com/#!/). I’m also open to other options (e.g., creating a crowdsourced webpage, photogrammetry or drone applications, or other such project). Depending on your interest, I can certainly bring in people who can help train you in the topic you would like to do. Or you may have the required skillsets already, in which case the sky is the limit (literally for Drones)!
I will expect to explore with you your particular interests and what you want to do. We would then set up either some mini in-class training sessions with folks brought in to help us out, or training sessions at Sustainable Archaeology. By the start of Fall Reading week and Thanksgiving (October 9th), you need to have finalized what you will be doing and informed me (having discussed with me first the idea so I can give you a sense of how viable it is). Our class on November 13th will be given over to a mini symposium of you reporting for 5-10 minutes on the results of your project, focussing on what worked and what didn’t, what (or who!) the obstacles were to success, etc. If you were developing an app or possible AR exhibit, then present your project as a “pitch,” since you will have developed the project to a concept stage, rather than completed the end project. You would also be submitting at that time a 5-6 page report reviewing your experiences and challenges.

6. Final Paper or Project (30% undergraduate, 25% graduate): You have a lot of latitude for the final assignment. Broadly speaking, you can write a paper, or you can undertake a digital archaeology project. For the former, you will need to write a paper of 1500-2000 words long (undergraduate), or 3000-4000 words long (graduate) on a topic broadly related to digital archaeology/digital heritage, that is a critical assessment of practice and/or contemporary ethnical issues facing a digital archaeology (whose access, who’s past, who owns the right to replicate the past, collections or information crises; critical assessment of 2-3 online archaeological information repositories; is immersive environments/3D modelling “accurate” or “authentic,” a lot or a little; legacy collections/legacy data, virtual repatriation, intellectual property rights of 3D models, etc.). You have wide latitude here, but you need to pick a topic that you can easily cover off in a short essay, and you need to know that there is enough literature out there to help you get a handle on the topic. By October 30th I will want you to hand in a one page statement of your topic for your paper, stating what you hope to explore, and include 6-7 references (at least 4 of which will be scholarly publications, not blogs or online pages). I recommend you informally discussing with me beforehand what you are thinking of.

If you wish to do a digital project, I want you to meet with me during office hours in October to talk through what you would like to do (we can kick around some ideas and I can point you to possibilities). You will then need to submit a one page proposal on October 30th. The project you do can be anything that fits digital archaeology, and is either tied to your in-class digital project (taking it forward to the next stage of development/implementation), or a new one. The project is yours to conceive of and design, but I expect your one page proposal to have been well developed and feasible by the time you submit it. That will include laying out what the project goals are, what resources or digital data you will need, what anticipated challenges you face in making it happen (e.g., what kind of software or equipment will you need to develop skills on), who is going to help you, and what the final product will be for me to evaluate. Basically, you have to convince me that what you are going to do is do-able within the constraints of term work, other courses, etc. If I think it needs some revising, I’ll ask you to do so. If it looks too unorganized or challenging to accomplish by end of October, I’ll suggest you shift to writing a paper.

The paper/project will need to be completed for undergraduates on December 10th (Absolutely NO extensions possible at that point – marks need to be in the next day for you!). For graduates, you will need to be completed and submitted by December 31st.
COURSE SCHEDULE AND READINGS

Readings will be accessible online. Note: Readings will be augmented by students leading the class discussion as required

1. Sept 11th: Introduction to Course - Defining Digital Archaeology... sort of
We will go over the course outline, discuss course expectations, and review assignments. We will review the various options people may wish to pursue their digital project on. We will also discuss just what a “Digital archaeology & Digital heritage” means to each of us.

2. Sept 18th: Some Context and Introspection – Readings:
Beale, Garth and Paul Reilly
2014 After Virtual Archaeology: Rethinking Archaeological Approaches to the Adoption of Digital Technology. Internet Archaeology 44. https://doi.org/10.11141/ia.44.1
Caraher, William
Dallas, Costis
Huggett, Jeremy
Kansa, Eric
Shanks, Michael, and Christopher Witmore

3. September 25th: Social Media and Open Access
NOTE: Your Internet Review Proposal Due
Beck, Anthony
Huggett, J.

Mauthner, Natasha, and Odette Parry


Morgan, Colleen, and Stuart Eve


Perry, Sara, and Nicole Beale


4. October 2nd: Sustainable Archaeology, 3D Scanning and Digital CT
This week’s class will be held at Sustainable Archaeology, which is at the Museum of Ontario Archaeology (1600 Attawandaron Road). Students will get a tour of the facility and imaging equipment, and have short sessions 3D scanning artifacts, modeling those scans, and/or scanning on the facility MicroCT scanner. This is intended to be a hands on class to give you a taste for using this equipment and working through the software challenges of the equipment. For those who think they might like to do a final project using this equipment, this will be an opportunity for you to become familiar with, and ask about, your projects with SA staff.

October 9th: No Class, Thanksgiving
BUT NOTE: Selection of your digital project should be finalized by today, so you can work on it over Fall reading week.

5. October 16th: Data Born Digitally In, On, and Above the Field
Barber, Ian, Justin Maxwell & Richard Hemi


Campana, S.


Earley-Spadoni, Timothy


Jackson, Sarah, Christopher Motz and Linda Brown


Spigelman, Matthew, Ted Roberts and Shawn Fehrenbach

6. October 23rd: Archaeological Databases, Big Data, Informatics and Beyond
Agbe-Davies, Anna, Jillian Galle, Mark Hauser and Fraser Neiman
Cooper, Anwen, and Chris Green
2017 Big Questions for Large, Complex Datasets: Approaching Time and Space Using Composite Object Assemblages. Internet Archaeology 45. https://doi.org/10.11141/ia.45.1
Eiteljorg, Harrison II
McCoy, Mark
Labrador, Angela
Seifert, Christin, et al

7. October 30th: 3D Scanning and Printing Models
NOTE: Final Project/Paper Proposal Outline Due
Delpiano, Davide, Marco Peresani and Andreas Pastoors
Garstki, Kevin
Olsen, Brandon, Jody Gordon, Curtis Runnels, Steve Chomyszak
grosman, Leore
Tsiafaki, Despoina, et al

8. November 6th: Visualization and Virtual Archaeology
Bendicho, Victor Manuel

Carter, William Michael

Forte, Maurizio

Jeffry, Stuart

Reilly, Paul, Stephen Todd, and Andy Walter

Watterson, Alice

9. November 13th: Presentations on Digital Projects

10. November 20th: Digital Archaeological Communities
Haukaas, Colleen and Lisa Hodgetts

Laracuente, N.

Means, Bernard

Richardson, Lorna-Jane
2013  A Digital Public Archaeology? Papers from the Institute of Archaeology, UCL. https://pia-journal.co.uk/articles/10.5334/pia.431/

Taylor, Joel, and Laura Gibson

11. November 27th: Other Ways of Knowing in a Digitized Archaeological Heritage
Carboni, Nicola, and Livio de Luca 

Dawson, Peter, Richard Levy and Natasha Lyons 

Lyons, Natasha et al 

Ngata, Wayne, Hera Ngata-Gibson, and Amiria Salmond 

Were, Graeme 

12. December 4th: Digital Archaeology Beyond Archaeology: Issues to Think About 
Colley, Sarah 

Huffer, Damien and Shawn Graham 
2017 The Insta-Dead: The Rhetoric of the Human Remains Trade on Instagram. *Internet Archaeology* 45. https://doi.org/10.11141/ia.45.5

Issac, Gwyneira 

Richter, Ashley, V. Petrovic, D. Vanoni, Steve Parish and F. Kuester 

Thompson, Erin 
Western Standard Course Policies

All students should familiarize themselves with Western's current academic policies regarding *accessibility, plagiarism and scholastic offences, and medical accommodation*. These policies are outlined, with links to the full policies, at: [http://anthropology.uwo.ca/undergraduate/course_information/academic_policies.html](http://anthropology.uwo.ca/undergraduate/course_information/academic_policies.html)

**Requisites for this course** - Unless you have either the requisites for this course or written special permission to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

**Course Syllabus** - The Course syllabus is, in effect, a contract between instructor and student over mutual expectations for the course, course content, and grading. Any changes to the course after a syllabus has been finalized needs to be mutually agreed to by the instructor and a consensus of students in the class. However, NOT reading the syllabus is NOT acceptable as an excuse for not getting something done or claiming you were not informed of course expectations/assignments. At this point I would add that failure to read this syllabus, as evidenced by asking a question that is clearly answered in the syllabus, may invoke the wrath of Kahn, Voldemort, Thanos, Mugatu, Donald Trump or whatever evil being or supervillain you imagine here. If you have any questions about anything in the course syllabus or wish to raise a concern, please meet with me during office hours to discuss further.