



The content is published under a Creative Commons Attribution Non-Commercial 4.0 License.

## Reviewed Article:

# Launching an Experimental Archaeology Course at the Undergraduate Level

Persistent Identifier: <https://exarc.net/ark:/88735/10666>

EXARC Journal Issue 2022/4 | Publication Date: 2022-12-02

Author(s): Jake Morton <sup>1</sup> ✉, Austin Mason <sup>2</sup>

<sup>1</sup> Classics Department, Carleton College, One North College St, Northfield, MN 55057, USA.

<sup>2</sup> Departments of Digital Humanities and History, Carleton College, Northfield MN, USA.



This article describes the process of designing and running a new course on Experimental Archaeology and Experiential History at a small liberal arts college in central Minnesota. We discuss the general methodological and pedagogical goals for the course, a representative three-week sequence of readings and labs based on the lives of shepherds, and the pedagogical and digital infrastructure we have developed. We hope this paper leads to

discussion and collaboration with people teaching similar courses, and also helps people get their own courses of this type started.



Key

components of any experimental archaeological project are having a place(s) to conduct experiments, financial support to purchase research materials, and the availability of enthusiastic expert collaborators.

## Introduction

This paper discusses an Experimental Archaeology and Experiential History course that Austin Mason (Director of Digital Arts & Humanities and Lecturer in History) and Jake Morton (Assistant Professor of Classics) developed and teach at Carleton College, a small liberal arts college in central Minnesota. We hope this paper leads to discussion and collaboration with people teaching similar courses, and also helps people get their own courses of this type started. We developed and co-taught the first iteration of this course (along with our colleague Alex Knodell) in Spring 2021, and plan to regularly rotate teaching duties in years going forward; Mason taught the course in Fall 2022, and Morton will teach the course in Spring 2023. We hope to follow up this article

every two years with new discussions on the course's development.

Our course aims to offer an experiential approach to crafts, technologies, and other material practices in past societies. Through a combination of in-class lecture and discussion time, hands-on activities in laboratory work, and collaborations with local craftspeople, farmers, and other experts, students examine and test a variety of hypotheses about how people in the past lived their lives, and learn about peoples that tend to be archaeologically invisible. Ancient History and Archaeology courses often have a focus on political and social developments due to the biases of the available primary source literature and archaeological evidence. In this course, we aim to get the students to think productively about people's lived experiences beyond these sources by having them literally "think through making," to paraphrase Tim Ingold, whose hands-on *Making* courses served as partial inspiration for our own (Ingold, 2013).

Each week is organised as an individual unit that engages a particular hypothesis about how people in the past lived their lives. For example, how did prehistoric people produce stone tools, pottery, or buildings? How did ancient Greeks and Romans feed and clothe themselves? How did medieval Europeans build their homes and bury their dead? Monday's class introduces the particular week's concept and what we know about it from a historical and archaeological perspective. On Wednesdays, we review and discuss previous experimental and experiential approaches, as a precursor to our own lab activity. On Thursday afternoons we hold our lab in an extended 3-to-4-hour session, often in outdoor spaces. Fridays involve some kind of follow up from the lab activity, either a classroom discussion or a concluding phase of the lab. The experimental labs are great times for student discussions, and we aim

for guided, but pretty open, discussions of the activities at hand and the societies in which they existed.

Regular assignments include short responses to readings and a weekly lab journal, as well as shared responsibilities for recording lab data, writing lab reports, and for maintaining the course website that we use to formally document our work (see below). For the final project, students develop a detailed proposal for their own experimental archaeology project, which they present to the class during the last week of the course.

There are many different ways to approach such a class and part of what we want to do in this article is lay out how our course is developing from a trial-and-error perspective. Two aspects of course design we have experimented with have been how to order the units and how much to interrelate the units. We will discuss here a three-week unit with a conceptual focus on shepherding societies that develops pedagogically to acclimate the students to working in an experimental archaeology lab format and learning to document their activities and results.

## Case Study: A Three-week Class Arc

This three-week unit covers three aspects of the lives of shepherds: wool-working, cheese making, and religious ritual. Each week has a different pedagogical goal and different experimental approach that are intended to build off the previous week. This unit is intended to begin the course and supply the students with the tools for further experimental research projects.

A running theme through the three-week unit is the importance of the shepherd's transhumant calendar in all aspects of their lives, including shearing, cheesemaking, and religious sacrifices. For much of the ancient Mediterranean this involved living from roughly late April to late October in high altitude summer pasture and the shepherd's home village, and the rest of the year in lowland pasture. Shearing was done in the spring, around the time of transhumance; lambs were birthed in early January, and excess males were culled just before the move from winter pasture. Sacrifices were often held in their lowland communities at the time of the spring cull, which also began the most intense period of the milking and cheesemaking.

### Week 1: Wool

The first week covers wool-working, and the stages of carding, spinning, and weaving, with the lab involving hands-on work in all three skills. An important part of experimental archaeology, and comparative anthropological studies more broadly, is working with experts and for this we bring in [Alejandra Sanchez](#), a local shepherd and wool-working enthusiast and educator. Week 1 is more focused on experiential history than experimental archaeology. The

goals are to achieve a greater understanding of daily life in the ancient Mediterranean, especially women's lives. The students will think about the entire cycle of events that existed when they see the physical archaeological artifact of the spindle whorl or loom weight. This serves as an introduction to connecting activities to objects for the students, as one spindle whorl or loom weight indicates an entire world of objects, activities, and lives in a shepherding society, including raising sheep, and shearing, cleaning, carding, spinning, and weaving the wool. As processing wool in the ancient Mediterranean was performed by women, these objects and their related activities give us a lens into the too-often "invisible" world of women. For the literature students in the class, a practical understanding of wool working helps them to better understand the metaphorical uses of wool working in ancient literature, historiography, poetry, and mythology, such as the famous scene of Penelope at the loom in the *Odyssey*.

During the Monday and Wednesday classes, the students discuss assigned readings on how wool has been historically processed as well as ethnographic accounts of traditional shepherding societies. In the lab, the students rotate in groups between stations learning to card, spin, and weave, with Alejandra and the professor(s) and TA helping direct each station (See Figures 1-3). Major points that the students experience and discuss within the lab and in Friday's class/lab include the dependent relationship of the different tasks to each other – for example, better carded wool leads to finer and easier to spin yarn, and more consistently spun yarn leads to easier weaving; the relative time required by the different activities and the realization that spinning was the predominant activity of many women's lives; that these skills are quick to learn but very difficult to master; how different skill sets are required for each activity and why this would lead to specialisation; and that these tasks lend themselves to social activity. Each of the insights open up new avenues for investigation, and by the Friday lab debrief discussion the students are asking a whole new set of questions of the sources examined earlier in the week.

## **Week 2: Cheese**

Week 2 turns to making cheese over an open fire. Pedagogically, this week again has an experiential focus, but now incorporates learning to follow a lab manual, to take careful notes and documentation, and to write up a more formal lab report – but under low stakes as the instructors know what will happen to a high degree of certainty, as they are not solving for an unknown.

During the course of the Monday and Wednesday classes, we discuss readings on ancient, pre-modern, and modern cheesemaking techniques, as well as further anthropological studies of pre-modern shepherds. In the lab, we move from indoors to an outside area on campus where we have been given permission to hold labs using fire. Students break into three- or four-person lab groups, with two groups per fire pit. Each pit gets a cast iron pot,

milk, and rennet. While traditional cheesemakers relied on their years of experience of cheesemaking since childhood to know when all the proper temperatures have been reached and for recognising the different stages of the process, the students have no such experience and instead use detailed lab manuals, thermometers, and timers, and focus on what signals one might learn to observe so that modern devices were not needed. The students bring the milk to a boil, add the rennet (See Figure 4), form the curd, cut the curds (See Figure 5), and strain the curds (See Figure 6). At this point, the students have made the basics from which all Mediterranean traditional cheeses are made (See Figure 7). The students then reserve 5-25% of the curds (different amounts are held back per group) and form the remaining curds into balls and boil them in water to make a 'quick mozzarella' (See Figure 8). The reserved curds are combined with the whey and boiled, and then strained to make a whey-cheese (such as ricotta).

During the lab and in the follow-up in Friday's class, the students discuss concepts including how cheesemaking involves a long period of constant activity but at a low intensity (a nice bit of metonymy for the life of a shepherd); the role of teamwork in such an activity and how specialised cheesemakers would bring together larger communities of shepherds. There are repeated themes from the previous week including that the basics of this skill are quick but very difficult to master, and that these tasks lend themselves to social activity. The students now also discuss their lab results, comparing the times and success rates of the different stages in the process, including the effect of different amounts of curd in the whey-cheese.

### **Week 3: Ritual**

Staying conceptually in the world of shepherds, we now move on to religion and the relationship of shepherds to religious calendars and religious rituals. In many ancient Mediterranean religions, the thighbones and tails of mammals were ritually burned for the gods, and in the third week of this sequence, we burn thighbones and tails over open fires. Shepherds played a key role in this religious world as they supplied the sacrificial animals. In fact, many ancient Mediterranean religious festivals occurred at the cull before the move to summer pasture. Pedagogically, this experiment matters more than before, as the results are not known to the students and because this is material that Morton will use in his research on the practicalities of ancient sacrificial ritual (Morton, 2015; forthcoming). The students' careful work in this lab and careful recording of the experiment are important.

On Monday and Wednesday, students discuss assigned ancient images and accounts of sacrificial rituals, as well as scholarship on modern recreations and sacrifice in general. For the lab, the students return to the same fire pits they used the previous week. They burn fat-wrapped beef femora, bare (not wrapped in fat) femora, and oxtails on the fires, all while carefully recording all aspects of the event (See Figures 9-12). At the end of the lab, they carry the burnt femora across campus to the Archaeology Lab to determine if these remains could

have been transported when burnt, as apparently occurred at the Bronze Age palace at Pylos, Greece (Isaakidou et al., 2002), and for further study. Morton uses beef femora and tails for in-class experiments rather than lamb femora, because they are much easier to find at butcher shops, and they are significantly larger and thus make for more dramatic results. While this lab has the strongest focus on scientific experiment of the three-week unit, it also has a strong experiential component, as the students are aware of, and documenting, their reactions to this ritual act both individually and as a community.

During the lab and in Friday's class, we discuss concepts including how the ritual itself worked, what it involved, and the students' sensory perceptions of it; and how the stages of the ritual (e.g., the fat-wrapped thighbones igniting with a dramatic burst of flame and the tail curling) are exciting and engaging and how that might have affected witnesses. They compare the times involved for each step of the ritual and discuss how this consistent (or not) timing would affect the organization of the ritual event, and exactly what happened at each stage of the ritual and how they measured it. In short, we aim for the students in this lab to explore both recreating the practicalities, and trying to understand the lived experience, of ancient sacrificial rituals. Part of this involves a new understanding of how tension can be built into a ritual, even one that always 'works'. The students end the 3-lab unit with a discussion of their own contribution to an ongoing scholarly conversation.

## Strengths and Challenges of our approach so far

Key components of any experimental archaeological project are having a place(s) to conduct experiments, financial support to purchase research materials, and the availability of enthusiastic expert collaborators. We have benefitted from many supportive experts both within our college faculty and from the wider local community. From within the college, members of the art department have been enthusiastic to help the course with clay- and metalworking. From the wider community, local shepherds, amateur wool workers, professional wool workers, bakers, and farmers have all been more than willing to come and work with our classes and share their passion for the history of their fields. Our personal backgrounds have helped give structure to the course, as Morton had a 10-year background as a cook and this shapes his research questions and lab designs, while Mason's strong background in Digital Humanities makes possible that key aspect of the course.

Challenges of the course so far have been mostly structural, such as developing how the labs should be paced, since there can be a hurry-up-and-wait feel to much of these traditional activities; and whether to order the labs based on a progression of lab activities or on a progression of pedagogical steps. The availability of outside experts, the cold Minnesota winter, and inopportune heavy rain also affect the order of the labs. As such, we ran the three labs discussed above in a different order in the first iteration of the course. Shifting the structure of the units in the course to follow a pedagogical arc rather than an activity-based arc is part of the trial-and-error of developing this course. We line up our collaborating

experts over the year before the course runs, but if we lose any of them for whatever reason, the availability of other experts in potentially different fields would shape how the class continues to develop.

## Pedagogical and Digital Infrastructure

Public education and outreach are fundamental aspects of Experimental Archaeology, and we knew from the beginning that we wanted students to document, illustrate and interpret their work on a [public-facing website](#), which is live and publicly accessible (See Figure 13). Our pedagogical goals were to encourage students to take increased ownership of their knowledge production by identifying authentic audiences and making their findings as widely accessible as possible, in keeping with best practices from the fields of Digital Humanities and Public History (Bass and Elmendorf, 2009; Brennan, 2016). At the same time, we did not want to discourage students from taking risks and reflecting honestly on what they were learning, making, and doing. We came up with a tiered assignment structure for the course that allowed for both loose individual reflections and increasingly formal public group writing.

### Personal Reflections (private to the class)

Our discussions begin in class on Mondays in the supportive environment of the classroom, where students can practice *Citizenship and Participation* by engaging with unfamiliar concepts and trying out new ideas with their peers and professors. These initial thoughts are elaborated before Wednesday classes in written *Weekly Reading Reflections* posted to a discussion forum on our closed learning management system (Moodle), allowing the students to take a first stab at articulating their thoughts on this new (to them) topic and respond to those of their peers in a protected environment.

As we shift to the lab in the back half of each week, we scaffold assignments so that students' initial responses to each experiment can be increasingly refined and polished for public presentation. Students are asked to maintain an individual *Weekly Lab Journal* on our collective course website, which they are expected to update with a short entry immediately following the Thursday labs before class meets on Friday. These journal entries are intended as a brief personal reflection on what each student did in the lab and what they learned from it that helps crystallise thoughts for our follow up in-class discussion on Fridays. The lab journals are kept private to the class so that students can see each other's posts, but the public is not able to access them. This allows for a collective first draft to be written quickly on our website, which subsequent work can pull from and revise into a formal report. We found this to be particularly helpful for highlighting the experiential aspects of each lab and their social and emotional impact on the participants.

### Public Reports (openly published)

One of the major advantages of the way we have structured this class is that the experiments conducted in each weekly lab are provisionally “published” on a collectively authored website within a single week. This not only allows students to realise immediate tangible results from their work in the class, but also enables us to document and share the archaeological experiments we are conducting with our academic research communities and public heritage partners in record time.

Students are organised into groups of four or five students for each half of the term, providing enough continuity for them to form good working relationships, while minimizing the risks of poor performing students weighing down others for the entire course. During each weekly lab, one student is assigned to be the “Data Recorder” and given a notebook, camera, and primary responsibility for collecting the data on the experiment as it progresses. That student is responsible for cleaning up and posting all relevant data to the class website by the Monday following each experiment in a *Lab Group Data* post (See Figure 14). The data recorder role rotates through the group members each week, so that each student does this twice over the course of the term in our ten-week trimester system (for semester schools, this could easily be adapted to three rotations over a 15 week term). The group’s data reports are made public on our website as the raw data from the experiment, which then become a resource for the students writing up the *Formal Lab Summary*.

As the top level of our assignment scaffolding, each week three different students are assigned responsibility for presenting a formal writeup for each lab section on the course website. These roles rotate weekly, so that each student writes one or two reports over the course, depending on the numbers enrolled. The *Formal Lab Summary* involves introducing the background and aims of the lab based on assigned readings and class discussions, presenting the research questions and methods of the experiment based on the instructor-provided lab manual, and summarizing the results and experiences of the lab from the personal journal entries and group data reports already posted to the website. All of this is expected to be illustrated with appropriate photos and other media (which all members of the class continuously upload to a shared folder in Google Drive), formatted for web publication, and cited with references to relevant literature assigned in class. The result is a quick, but thorough report, shared publicly by the Wednesday of each week, only 6 days following each experiment.

In terms of technical infrastructure, we used the WordPress platform to build the website and facilitate quick blog-style publication. All students are added to the site with the Author role, which gives them permission to publish and edit their own posts and read those of all other students, once logged in. We use WordPress’s Categories and Tags to organise and control the visibility of different types of content. When creating a new post, students are instructed to choose the appropriate category for each assignment: Student Journal, Lab Group Data, or Lab Summary. To ensure that personal content is kept secure, all posts are categorised as a

Student Journal by default and automatically password protected using the Password Protect WordPress plugin. We also ask the students to tag each post with the appropriate week (e.g., Week 5) and running of the course (e.g., 2020-2021\_Spring), which allows posts to be sorted and filtered by year, weekly lab, and type of assignment with ease. The tags and categories also allow us to add Blocks to the bottom of each Lab Summary that link to the associated raw data posts for each group using a Query Loop block. The resulting course website has a simple organization and clean landing page through which visitors can link straight to the top tier summaries of our student-written reports and subsequently work down to finer levels of detail.

## Conclusion

Experimental Archaeology and Experiential History at Carleton College is still a new course, but one that we feel confident has already proven to be a successful model for how to launch an Experimental Archaeology course at the undergraduate level. The course schedule focuses on a different material each week but operates on a predictably regular rotation centered on a four-hour lab session each Thursday, which is set up on Wednesday and debriefed on Friday. Students work in groups and record data in the labs, which they write up on a public course website as personal reflections each Friday, cleaned group data reports on Monday and polished, illustrated formal lab summaries each Wednesday. In addition to making the course a repeatable, flexible container that can accommodate new content on each running, the data reports make moving from class-based research to publicly presented and published scholarly interventions incredibly easy and remarkably quick.

The formal lab summary on our website of the ritual sacrifice experiment from the case study discussed above shows the potential of the class's pedagogical and technical infrastructure. Morton presented results from this experiment and student photos in a paper entitled *The Headless Tables of Pylos Ta 715* at the Archaeological Institute of America Annual Meeting in 2022, and in an article on Greek Bronze Age animal sacrifice which will be published by the *American Journal of Archaeology* in April 2023. During the same lab that the students were experimenting with Greek animal rituals, Mason had the students conduct a separate set of experiments to test whether the fires that burned bodies in early medieval English cremation cemeteries could have been constructed similarly to those that turned shaped clay into ceramic urns to hold the ashes. The results were affirmative and compelling, and Mason presented them at a conference of the International Society for the Study of Early Medieval England mere weeks after the class ended. The paper - including photos and videos shot by the students - was very well received and has led to the experiment's inclusion in a forthcoming volume on *Cremation in the Early Middle Ages* edited by Howard Williams and Femke Lippok (Williams, 2022). The rapid progression from engaged course experience, to successful conference presentation, to forthcoming publication has convinced us that this course structure is both an effective means of engaging students in sympathetic

investigations of the lived experience of past peoples and a successful example of how to combine faculty research, undergraduate teaching and digital history at a small liberal arts college.

We hope this paper leads to dialogue with other professors teaching, or wanting to start, similar courses, or with museum curators and other cultural heritage professionals that see connections to their education and outreach efforts. We would gladly share any lab manuals, assignment sheets or other class materials and would enthusiastically discuss questions of logistics, practicalities, and pedagogy of our labs and general approach to teaching the topic.

🔖 Keywords **education**  
**experiment**

🔖 Country **USA**

## Bibliography

Bass, R. and Elmendorf, H., 2009. Designing for Difficulty: Social Pedagogies as a Framework for Course Design. *Teagle Foundation White Paper*. Available at:

< [https://blogs.commonsgorgetown.edu/bassr/social-pedagogies/#\\_ftn1](https://blogs.commonsgorgetown.edu/bassr/social-pedagogies/#_ftn1) > [Accessed 12 August 2022]

Brennan, S., 2016. Public, First. In: M. Gold and L. Klein, eds. *Debates in the Digital Humanities 2016*. Minneapolis: University of Minnesota Press. Available at:

< <https://dhdebates.gc.cuny.edu/read/65be1a40-6473-4d9e-ba75-6380e5a72138/section/11b9805a-a8e0-42e3-9a1c-fad46e4b78e5#ch32> > [Accessed 12 August 2022]

Ingold, T., 2013. *Making: Anthropology, Archaeology, Art and Architecture*. London: Routledge.

Isaakidou, V., Halstead, P., Davis, J. and Stocker, S., 2002. Burnt Animal Sacrifice in Late Bronze Age Greece: New Evidence from the Mycenaean 'Palace of Nestor,' Pylos. *Antiquity*, 76(291), pp. 86–92.

Mason, A., Morton, J., Knodell, A., and Students of ARCN 222, 2022. - Carleton College. Experimental Archaeology / Experiential History. Available at: < <https://222.arcn.sites.carleton.edu/> > [Accessed 14 November 2022].

Morton, J., 2015. The Experience of Sacrifice: Investigating Fat-Wrapped Thighbones. In: M. Miles, ed. *Autopsy in Athens: Recent Archaeological Research on Athens and Attica*. Oxford: Oxbow Books, pp. 66–75.

Morton, J., Forthcoming. From the Butcher's Knife to God's Ears: The Leg and Tail in Greek Sacrifice. In: G. Ekroth, and M. Carbon, eds. *In From Snout to Tail: Exploring the Greek Sacrificial Animal from the Literary, Epigraphical, Iconographical, Archaeological and Zooarchaeological Evidence*, Stockholm: The Swedish Institute at Athens.

Sanchez, Alejandra, 2022. A Woolen Forest – About Us and Our Work. Available at: <<https://www.awoolenforest.com/about2&gt;>; [Accessed 12 August 2022]

Williams, H.M.R., 2022. Cremation in the Early Middle Ages – Interview 13 with Dr Austin Mason. *Archaeodeath*. Available at: < <https://howardwilliamsblog.wordpress.com/2022/05/06/cremation-in-the-early-middle-ages-interview-13-with-dr-austin-mason/> > [Accessed 12 August 2022]

## Sources for images

Fig 14. Course website group data reports: <https://222.arcn.sites.carleton.edu/lab-summary/lab-summary-week-4-ritu...>

## Share This Page

## | Corresponding Author

**Jake Morton**

Classics Department  
Carleton College  
One North College St  
Northfield, MN 55057  
USA

[E-mail Contact](#)

## | Gallery Image



FIG 1. STUDENTS LEARNING TO SPIN AND WEAVE. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 2. STUDENT PRACTICING CARDING. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 3. SANCHEZ (CENTER) TEACHING WEAVING. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 4. STUDENT ADDING RENNET TO THE HEATED MILK. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 5. MAINTAINING TEMPERATURE ON FRESHLY CUT CURDS. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 6. STRAINING THE CURDS. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 7. STUDENT HOLDING STRAINED AND DRAINED CURDS. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 8. REBOILING BALLED CURDS TO MAKE A QUICK MOZZARELLA-TYPE CHEESE. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 9. MEASURING THE BEEF FEMUR BEFORE BURNING. PHOTO BY JAKE MORTON AND AUSTIN MASON




FIG 10. STUDENT HOLDING A FAT-WRAPPED BEEF FEMUR. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 11. OXTAIL AND FAT-WRAPPED BEEF FEMUR JUST PLACED ON THE FIRE. PHOTO BY JAKE MORTON AND AUSTIN MASON



FIG 12. FAT-WRAPPED BEEF FEMUR PUTTING FORTH THE CHARACTERISTIC BURST OF FLAME AND OXTAIL IN PROCESS OF CURLING. PHOTO BY JAKE MORTON AND AUSTIN MASON

A photograph of three clay pots in a field. The pot in the foreground is a wide-mouthed bowl filled with dark stones. Behind it are two taller, narrower pots. The background shows a field with some trees and a log.

## Experimental Archaeology and Experiential History

### ARC222 at Carleton College

Welcome to the website for *ARC222: Experimental Archaeology and Experiential History*, a course taught beginning spring 2021 at Carleton College by [Alex Knodell](#), [Austin Mason](#), and [Jake Morton](#).

**T**his course offers an experiential approach to crafts, technologies, and other material practices in premodern societies. Through hands-on activities and collaborations with local craftspeople, farmers, and other experts, this course will examine and test a variety of hypotheses about how people in the past lived their lives. How did prehistoric people produce stone tools, pottery, and metal? How did ancient Greeks and Romans feed and clothe themselves? How did medieval Europeans build their homes and bury their dead? Students will answer these questions and more by actively participating in a range of experimental archaeology and experiential history projects.

This website will hold weekly lab journals for participants and both formal and informal documentation of our work.

### Fall 2021



FIG 13. COURSE WEBSITE HOMEPAGE: [HTTPS://222.ARCN.SITES.CARLETON.EDU](https://222.arcn.sites.carleton.edu)

## Group Data Reports

### Week 4: Ritual Fire – Group E Data

Group 1 Bovine Femur and Tail Together 0min: 00sec femur and tail placed on fire 1:00 lots of smoke. tail starts moving wrong way 2:00 tail has moved really far wrong way. fire starting to get bigger 3:50 wind pushing fire over, but 3 feet of flame from fire 6:00 Jake flips over our tail...

[Continue reading...](#)

April 26, 2021

### Week 4: Rituals with Fire – Group A Data

This week, Group A worked with Austin and Group D on investigating early English cremation rites with linen-wrapped pork shoulders. We were comparing the arguments of Calvin Wells and Jackie McKinley over the shape of the pyre and position of our "bodies." Before: The first steps in this process were to weigh our pork shoulders...

[Continue reading...](#)

April 26, 2021

### Week 4 Lab Data: Group B

Introduction: Group B worked at Firepit #1 with Group F to burn a bovine femur wrapped twice in omentum, a bovine tail, a lamb femur wrapped twice in omentum, and two sets of splanchna from a lamb on an open fire pit. Each set of splanchna contained 1 heart, 1 liver, and 2 kidneys. Femurs...

[Continue reading...](#)

April 25, 2021

### Week 4: Ritual Fire Lab Data (Group D)



Introduction Our group gathered on Mai Fete Island on a windy spring afternoon to investigate early English cremation rites. We burned a pork shoulder (our stand-in body) to test at what temperature the flesh would burn away, and to assess whether placing bodies on or under the funeral pyres is more successful (competing arguments proposed...

[Continue reading...](#)

### Group F Lab Data – Week 4



Group F participated in the sacrificial ritual section of the lab. We worked closely with Group B (our data should be quite similar) to investigate the performance of rites at the altar. Over the course of three hours, we were able to burn two bovine femurs wrapped in fat, one wrapped lamb femur, one unwrapped...

[Continue reading...](#)

FIG 14. COURSE WEBSITE GROUP DATA REPORTS: [HTTPS://222.ARCN.SITES.CARLETON.EDU](https://222.ARCN.SITES.CARLETON.EDU)