

## **DIGITAL ZOOARCHAEOLOGY ANG6905-FLMN(31859)**

Spring 2021

Wednesdays 2:00-5:00 (2:00-3:00 lecture, 3:00-5:00 lab)

Dr. Kitty Emery

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### **Specifics**

- Weekly meetings 1-3 hrs, combined discussion and labwork
- Students can join for credit (1-3 credits) or simply for the fun of it (professor approval for either option, contact Dr. Emery)
- Meetings will be primarily virtual, will include guest speakers, and participation will be mandatory for credit-earning students. Lab work will be in person or virtual depending on the project chosen.
- Grades based on participation and project completion

This course explores the rapidly expanding world of open access digital data in the disciplines of archaeology and biodiversity, recognizing zooarchaeology [environmental archaeology] data as essential for transdisciplinary research across these disciplinary boundaries and more.

Zooarchaeological data, as with much social science data, is highly interpretive, culturally sensitive, and typically not openly accessible. This is unfortunate because zooarchaeological data is essential for understanding many of the world's most dangerous crises - loss of biodiversity, climate change, human migration pressure, cultural isolationism ... Zooarchaeology lies temporally between paleontological and neontological biology, linking the deep pre-human past with modern anthropocene environments and ecologies. Neither science can be fully understood without reference to the early anthropocene history of human synergies with the environment and the extent to which humans impacted "pristine" and changing environments and the extent to which these impacted human cultural development. As a social science, zooarchaeology provides a conduit to understanding the repeating issues in human history including those of recent history. Thus, to reach its full potential, the science of zooarchaeology must join the data revolution and zooarchaeologists must make their data openly accessible, findable, understandable in combination with data from other disciplines, and reusable for ethical and impactful research.

In this class, we will discuss open access data systems in the social and biological sciences (with brief forays into other realms such as geological sciences, information science, etc.) and will learn how these systems have developed and how they make data available. We will explore the open access data systems available to environmental archaeology data across the world, with particular focus on North American and European data sharing systems. We will use datasets from the Environmental Archaeology Program archives to learn how to link

zooarchaeological data to some of the most commonly used archaeological and biological data sharing systems, and students will publish a dataset to one or more of the open access data systems. The dataset can be one of their own or, with advice of EAP personnel, from the EAP archives.

## Classes

Week of:

Jan 11 - Intro; FAIR data, archaeology vs biology perspectives overview; ethical issues for archaeological data (or any data)

Jan 18 - why zooarch data is essential and why it isn't out there yet

Jan 25 - lesson on preparing your own or legacy data for publication (data entry, verbatims, data cleaning, metadata, etc.)

Feb 1 - issues: ontologies and linked data vs standardization; growing datasets through OCR and machine learning; citizen science and other mass data gathering vs concerns for data accuracy

Feb 8 - ZAN: intro to data mapping, metadata, other particulars

Feb 15 - general data repositories, data publishers (eg Dryad), and distributed data systems

Feb 22 - archaeological data publishers (OC, Athene/Ariadne, SEAD), repositories (tDAR, ADS/Oasis), and special function databases (eg Isobank, CARD)

March 1 - how to publish archaeological data (full steps from protocols.io, periodO, in tDAR or OC, supplementary data in pubs, etc. etc.)

March 8 - spring break

March 15 - maybe guest lecture

March 22- biological data publishers, repositories, special function databases (eg genbank, FuTRES)

March 29 - maybe guest lecture

April 5 - lesson on how to publish across disciplines: archaeological data published to GBIF using ZAN (DwC, extensions, etc.)

April 12 - Final Project Due (SAAs)

April 19 - extended deadline for Final Project (SAAs)

## University of Florida Policy Statements

**Grades and Grade Points:** For information on current UF policies for assigning grade points, see:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**Absences and Make-Up Work:** Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**Online Course Evaluation Process:** Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu> . Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results> .

**Academic Honesty:** As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge : *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is assumed

that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

**Software Use:** All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

**Campus Helping Resources:** Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)
- U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)
- Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)

**Services for Students with Disabilities:** The Disability Resource Center (0001 Reid Hall, 392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

**Student Complaints:** The University of Florida believes strongly in the ability of students to express concerns regarding their experiences at the University. UF Regulation 4.012 provides a procedure for filing a formal grievance:

<http://regulations.ufl.edu/regulations/uf-4-student-affairs/>

Some useful contacts are:

- Ombuds office: <http://www.ombuds.ufl.edu/> 31 Tigert Hall, 352-392-1308.
- Dean of Students Office: <http://www.dso.ufl.edu/> 202 Peabody Hall, 352-392-1261

**Sexual Harassment:** It is the policy of The University of Florida to provide an educational and working environment for its students, faculty, and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination on the basis of sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages students, faculty, staff, and visitors to promptly report sex discrimination and sexual harassment. If you believe you have been subjected to sex discrimination or sexual harassment please report the incident any University official, administrator, or supervisor. The Office of Human Resource Services investigates all complaints. Incidents should be reported as soon as possible after the time of their occurrence.