

# ANTH 491 Zooarchaeology-NewCrs-2015-10-26

## Form Information

**First Step:** Change the text in the [brackets] so it looks like this: **CRIM 101 Intro to Criminology-NewCrs-2015-08-10**

**Second Step:** Click save on bottom right

**Third Step:** Make sure the word "**DRAFT**" is in yellow at the top of the proposal

**Fourth Step:** Click on **EDIT CONTENTS** and start completing the template. When exiting or done, click save on bottom right

When ready to submit click on the workflow icon and hit approve. It will then move to the chair as the next step in the workflow.

Please direct any questions to curriculum-approval@iup.edu

### \*Indicates a required field

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<b>Contact Person*</b>	Sarah W. Neusius	<b>Contact Email*</b>	sawn@iup.edu
<b>Proposing Department/Unit*</b>	Anthropology	<b>Contact Phone*</b>	724 357-2133

**(A) Course Prefix\*** *See the Registrar's List of Unavailable Course Numbers at <http://www.iup.edu/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=129323>*

ANTH

**(B) Course Number\*** *If Dual Listed, enter both course numbers*

491/591

**(C) Course Title\*** Zooarchaeology

**(D) Course Level\*** graduate-level  
undergraduate-level

**(E) Cross Listed\*** *Dual Listed = Courses listed at two levels, such as undergraduate and graduate, masters and doctoral, etc. Cross Listed = Course has more than one prefix such as GEOG/RGPL 233*

NO

If YES, with:

**(F) Variable Credit\*** NO

If YES, enter the number of credits:

**(G) Variable Title\*** NO

If YES, enter the title(s):

**(H) Number of Credits\***

Class Hours:3

Lab Hours:0

Credits:3

**(I)**

**Prerequisite(s)** none

**(J)**

**Co-requisite(s)** *This means that another course must be taken in the same semester as the proposed course*

**(K) Additional Information**

*Check all that apply. Note: Additional documentation will be required*

*\* Teacher Education: Please complete the Teacher*

*Education section of this form (below)*

*\* Liberal Studies: Please complete the Liberal Studies*

*section of this form (below)*

*\* Distance Education: Please complete the Distance*

*Education section of this form (below)*

**(L)**

**Recommended Class Size** YES  
Number (Enter Zero if No):24

If YES: (Check one of the following reasons and provide a narrative explanation)

Physical Limitation of Classroom

Explain (required):

Class size is limited by the space necessary for handling and studying specimens.

**(M) Catalog Description\***

***Guidelines: Do not include pre/co-requisite information here. The registrar prefers a concise description of course content, beginning with an active verb.***

Introduces the archaeological specialty of zooarchaeology, which is the study of human-animal interactions through the analysis of archaeological remains from archaeological sites. Explores the basics of vertebrate osteology through lectures and hands-on exercises as well as the nature of various types of zooarchaeological interpretation such as studies of hunting and butchering practices, dietary importance, seasonality, domestication, paleopathology and past environment.

**(N) Student Learning Outcomes\***

***These should be measurable, appropriate to the course level, and phrased in terms of student achievement, not instructional or content outcomes***

***If dual listed, indicate additional learning objectives for the higher level course.***

Students in this course will be able to

- 1) describe the nature of zooarchaeological analysis and why it is important within modern archaeology,
- 2) demonstrate beginning skills in the identification of animal bone and shell with emphasis on mammalian remains,
- 3) process, sort and label a comparative skeleton for zooarchaeological study
- 4) evaluate the usefulness of zooarchaeological reports in archaeology and other types of environmental science

Besides meeting these objectives, graduate students in this course will additionally be able to

- 1) quantify zooarchaeological data using standard zooarchaeological methods and
- 2) integrate these types of data into archaeological reports.

**(O) Brief Course Outline\***

***Give an outline of sufficient detail to communicate the course content to faculty across campus. It is not necessary to include specific readings, calendar, or assignments***

***As outlined by the federal definition of a "credit hour", the following should be a consideration regarding student work - For every one hour of classroom or***

***direct faculty instruction, there should be a minimum of two hours of out of class student work.***

Introduction: What is zooarchaeology?

History of Zooarchaeology

Taxonomy

Vertebrate and invertebrate anatomy

The function of hard tissues

Vertebrate locomotion

Growth and age of skeletal tissues

**All Students Select A Specimen For Skeletal Processing**

**Grad Homework 1 – Key terms, Nature of variables, Levels of measurement**

The Vertebrate Skull

Features of the vertebrate skull

Variation in the vertebrate skull

Fish skulls and scales

**Skeletal Quiz One - Skulls and Scales**

Vertebrate teeth

Recognizing different types of mammalian teeth

**Skeletal Quiz Two - Teeth**

The Axial Skeleton

Bones of the axial skeleton and their features

How does the axial skeleton vary among vertebrates

**Skeletal Quiz Three - Axial Skeleton**

**Grad Homework 2 – Relative Importance of Taxa (NSP, NISP, MNI calculations)**

Zooarchaeological Methods I

Comparative collections and zooarchaeology labs

Measurements of the vertebrate skeleton

**MIDTERM EXAM**

Taphonomic studies in zooarchaeology

Primary Data collection in zooarchaeology

The Pectoral and Pelvic girdles

Features of the pectoral girdle

Features of the pelvic girdle

Variation in the vertebrate pectoral and pelvic girdles

**Skeletal Quiz Four - Girdles**

**Grad Homework 3 – Biomass and Meat Weight, Sampling and Richness, Effects of Recovery Technique**

Zooarchaeological Methods II

Secondary data in zooarchaeology

Relative importance of taxa

Body part data

Dietary contribution and niche breadth

The Limbs

Features of the vertebrate forelimbs

Features of the vertebrate hindlimbs

Variation in vertebrate limbs

**Skeletal Quiz Five - Forelimbs and Hindlimbs**

Features of the manus (fore feet)

Features of the pes (hind feet)

How are fins structured?

Invertebrate structures

**Skeletal Quiz Six - Feet and Fins and Invertebrate Structures**

**Grad Homework 4 – Diversity Measures and Body Part representation (MNE, MAU)**

Zooarchaeological Methods III

Age Estimates, Paleopathology and Measurement

Subsistence and Humans as Predators

Domestication of Animals, Urban Zooarchaeology

**STUDENT SKELETAL PROJECT DUE**

Reconstruction of Past Environments

Applied Zooarchaeology

Digital databases in Zooarchaeology

Course Wrap Up

**GRADUATE STUDENT ANALYSIS REPORT DUE**

**FINAL EXAM**

**Rationale for Proposal**

**(P) Why is this Course Being Proposed?\***

This course has been taught as one option in ANTH 484/584 Specialized Methods in Archaeology, but since it has been taught on a regular basis for more than a decade, it makes more sense for it to be a stand alone course. In addition, faculty believe the fact that we offer this methods course could be attractive to some quality graduate students considering our Applied Archaeology MA. Under the current system such students cannot tell that we offer Zooarchaeology on a regular basis by examining our course list.

**(Q) University Senate Summary of Rationale**

***Please enter a single paragraph summary/rationale of changes or proposal for University Senate.***

This course has been taught as one option in ANTH 484/584 Specialized Methods in Archaeology, but since it has been taught on a regular basis for more than a decade, it makes more sense for it to be a stand-alone course.

**(R) How Does it Fit into the Departmental Curriculum?\***

***Check all that apply***

Free Elective

If Other, please explain:

**(S) Is a Similar Class Offered in Other Departments?\***

NO

Please Provide Comment:

**(T) Does it Serve the College/University Above and Beyond the Role It Serves in the Department?\***

NO

Please Provide Comment:

**(U) Who is the Target Audience for the Course?\***

Department Elective

Open to Any Student

If Other, please explain:

<b>(V) Implications for Other Departments*</b>	<p>A. What are the implications for other departments?</p> <p><i>(For Example: overlap of content with other disciplines, requirements for other programs)</i></p>				
	<p>There is no overlap. The proposed course is archaeology specific.</p>				
	<p>B. How have you addressed this with other department(s) involved? What was the outcome of that attempt?</p>				
	<p>n/a</p>				
<b>(W) Attach Supporting Documents for Implications, if Necessary</b>	<table border="1"> <thead> <tr> <th data-bbox="386 558 423 579">File</th> <th data-bbox="1211 558 1300 579">Modified ▲</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="height: 100px;"></td> </tr> </tbody> </table>	File	Modified ▲		
File	Modified ▲				
<b>(X) Are the Resources Adequate?*</b>	<p><i>(i.e. faculty, space, equipment, laboratory supplies, library materials, travel funds, etc.)</i></p>				
	<p>YES</p>				
	<p>Please Provide Comment:</p>				

**Distance Education Section**

*- Complete this section only if adding Distance Education to a New or Existing Course*

<b>If Completing this Section,</b>	
<b>Check the Box to the Right:</b>	
<b>Course Prefix/Number</b>	
<b>Course Title</b>	
<b>Type of Proposal</b>	<p><i>See CBA, Art. 42.D.1 for Definition</i></p>
<b>Brief Course Outline</b>	<p><i>Give an outline of sufficient detail to communicate the course content to faculty across campus. It is not necessary to include specific readings, calendar or assignments</i></p> <p><i>As outlined by the federal definition of a "credit hour", the following should be a consideration regarding student work - For every one hour of classroom or direct faculty instruction, there should be a minimum of two hours of out of class student work.</i></p>

**Rationale for Proposal (Required Questions from CBA)**

**How is/are the instructor(s) qualified**

**in the Distance Education delivery**

**method as well as the discipline?**

**For each outcome in the course, describe**

**how the outcome will be achieved using**

**Distance Education technologies.**

**How will the instructor-student and**

**student-student interaction take place?**

**(if applicable)**

**How will student achievement be evaluated?**

**How will academic honesty for tests**

**and assignments be addressed?**

**Liberal Studies Section**

**- Complete this section only for a new Liberal Studies course or Liberal Studies course revision**

**If Completing this Section,**

**Check the Box to the Right:**

**Liberal Studies Course Designations (Check all that apply)**

**Learning Skills:**

**Knowledge Area:**

**Liberal Studies Elective**

***Please mark the designation(s) that apply - must meet at least one***

<p>Expected Undergraduate Student Learning Outcomes (EUSLOs)</p>	<p><i>Describe how each Student Learning Outcome in the course enables students to become Informed Learners, Empowered Learners and/or Responsible Learners</i></p> <p>See <a href="http://www.iup.edu/WorkArea/DownloadAsset.aspx?id=181694">http://www.iup.edu/WorkArea/DownloadAsset.aspx?id=181694</a></p>
<p>Description of the Required Content for this Category</p>	<p><i>Narrative on how the course will address the Selected Category Content</i></p>

All Liberal Studies courses are required to include perspectives on cultures and have a supplemental reading.

Please answer the following questions.

<p>Liberal Studies courses must include the perspectives and contributions of ethnic and racial minorities and of women whenever appropriate to the subject matter. Please explain how this course will meet this criterion.</p>	
<p>Liberal Studies courses require the reading and use by students of at least one non-textbook work of fiction or non-fiction or a collection of related articles. Please describe how your course will meet this criterion.</p>	

### Teacher Education Section

- Complete this section only for a new Teacher Education course or Teacher Education course revision

<p>If Completing this Section, Check the Box to the Right:</p>	
<p>Course Designations:</p>	



**Key Assessments**

For both new and revised courses, please attach (see the program education coordinator):

- The Overall Program Assessment Matrix
- The Key Assessment Guidelines
- The Key Assessment Rubric

**File**

**Modified** ^

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No files shared here yet.

**Narrative Description of the**

***How the proposal relates to the Education Major***

**Required Content**

**For Deans Review**

Are Resources Available/Sufficient for this Course?

Is the Proposal Congruent with the College Mission?

Has the Proposer Attempted to Resolve Potential Conflicts with Other Academic Units?

Comments: