## ANTH 488/588 Geophysical Applications in Archaeology-NewCrs-2015-10-26

• The workflow icon is no longer available. Please click on the Page Status after the orange circle icon near the page title. \*

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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Contact Person*	William J Chadwick	Contact Email*	wchadwic@iup.edu
Proposing Department/Unit*	Anthropology	Contact Phone*	724-357-2659

(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
Number"	488 / 588
(C) Course Title*	Geophysical Applications in Archaeology
(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 none
(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):  Need for special purpose classroom and equipment.
(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.  Provides the methodological and technological knowledge to apply various geophysical systems used in archaeological investigations. These systems may include, but are not limited to, Ground-Penetrating Radar, Magnetometry, Electrical Resistivity, Conductivity, and Susceptibility.
(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.  All students will be able to:  (1) Describe detailed examples of the interdisciplinary nature of archaeology.  (2) Determine which geophysical systems are appropriate to answer archaeological questions.  (3) Identify and employ the appropriate methods of geophysical data collection that will allow the recognition of archaeological features of different sizes and in different environmental settings.  Graduate students will also be able to:  (4) Utilize appropriate software to process and interpret geophysical data and differentiate archaeological features.
	(5) Design, implement, and present the results from an independent research project.

F

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.

Week 1: Introduction to geophysics

Week 2: Geophysical Theory

Week 3: Geophysical Field Methods

Week 4: Introduction to Ground-Penetrating Radar

Week 5: Collection of Ground-Penetrating Radar data

Week 6: Processing and Presentation of Ground-Penetrating Radar data

Week 7: Introduction of Magnetometry

Week 8: Collection of Magnetic Gradiometer data

Week 9: Processing and Presentation of Magnetic Gradiometer data

Week 10: Introduction to Resistivity/Conductivity

Week 11: Collection of Resistivity/Conductivity Data

Week 12: Processing and Presentation of Resistivity/Conductivity Data

Week 13 Geophysics as A Cultural Resource Management tool

Week 14 Case Studies

Final examination

	Rationale for Proposal
(P) Why is this Course Being Proposed?*	This course has been offered regularly as an option under ANTH 484/584 Specialized Methods in Archaeology for many years to both undergraduate and graduate students. This course as a standalone offering has been identified as a potential to attract quality graduate students considering the departments Applied Archaeology M.A. Under the current system of using the ANTH 484/584 offering, it is unclear to prospective students what courses are actually being offered at any given time.
(Q) University Senate Summary of Rationale	Please enter a single paragraph summary/rationale of changes or proposal for University Senate.  This course has been offered regularly as an option under ANTH 484/584 Specialized Methods in Archaeology for many years to both undergraduate and graduate students. The new course number codifies past practice of offering this course as part of the regular Anthropology curriculum.
(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?	Please Provide Comment:  The proposed course has some overlap to some of our existing GEOS courses (GEOS323 - Geophysics and GEOS481 - Environmental Geophysics). But fundamentally, the content focus of the ANTH course is much more applied and directed toward archeological applications. The GEOS courses are primarily focused on deep earth geophysics and quantitative analysis of environmental geophysical data for hydrogeology.

(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:
(V) Implications for Other Departments*	A. What are the implications for other departments?  (For Example: overlap of content with other disciplines, requirements for other programs)  Geoscience offers GEOS 323 Geophysics, which has a similar name but focusses on the surface and interior of the solid earth rather than the practice of conducting geophysical surveys. The proposed ANTH course focuses on the application of geophysical technologies (e.g. ground-penetrating radar) to archaeological survey.  B. How have you addressed this with other department(s) involved? What was the outcome of that attempt?  Anthropology has communicated with Geoscience regarding this course and Geoscience has agreed to provide a letter of support.
(W) Attach Supporting Documents for Implications, if	File Modified  PDF File GEOS_ support for curriculum proposals.pdf Nov 10, 2015 by Benjamin L. Ford
(X) Are the Resources Adequate?*	(i.e. faculty, space, equipment, laboratory supplies, library materials, travel funds, etc.)  YES  Please Provide Comment:

## **Distance Education Section**

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

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If Completing this Section,	
Check the Box to the Right:	
Course Prefix/Number	
Course Title	
Type of Proposal	See CBA, Art. 42.D.1 for Definition

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.
	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 Design	nations (Check all that apply)
Learning Skills:	
Knowledge Area:	

Liberal Studies Elective	Please mark the designation(s) that apply - must meet at least one
Expected Undergraduate Student	Describe how each Student Learning Outcome in the course enables students to become Informed Learners, Empowered Learners and/or Responsible Learners
Learning Outcomes	See http://www.iup.edu/WorkArea/DownloadAsset.aspx?id=181694
(EUSLOs)	
Description of the Required	Narrative on how the course will address the Selected Category Content
Content for this Category	
All Liberal Stu	dies courses are required to include perspectives on cultures and have a supplemental reading.
	Please answer the following questions.
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.	
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.	
Teacher Education Se	ction
- Complete this section only for	a new Teacher Education course or Teacher Education course revision

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

If Completing this Section,	
Check the Box to the Right:	
Course Designations:	
Key Assessments	

	For both new and revised courses, please attach (see the program     The Overall Program Assessment Matrix     The Key Assessment Guidelines     The Key Assessment Rubric	education coordinator):
	File	Modified
	PDF File GEOS_ support for curriculum proposals.pdf	Nov 10, 2015 by Benjamin L. Ford
•	Drag and drop to upload or browse for files	
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:

Please scroll to the top and click the Page Status if you are ready to take action on the workflow. Please submit an ihelp if you have any questions <a href="http://ihelp.iup.edu">http://ihelp.iup.edu</a>