

# ANTH 492 Soil Science-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](mailto:curriculum-approval@iup.edu)

*\*Indicates a required field*

<b>Proposer*</b>	Lara Homsey-Messer	<b>Proposer Email*</b>	lmesser@iup.edu
<b>Contact Person*</b>	Lara Homsey-Messer	<b>Contact Email*</b>	lmesser@iup.edu
<b>Proposing Department/Unit*</b>	Anthropology	<b>Contact Phone*</b>	724-357-2117

<b>(A) Course Prefix*</b>	<p>See the Registrar's List of Unavailable Course Numbers at <a href="http://www.iup.edu/WorkArea/linkit.aspx?LinkIdentifier=id&amp;ItemID=129323">http://www.iup.edu/WorkArea/linkit.aspx?LinkIdentifier=id&amp;ItemID=129323</a></p> <p>ANTH</p>
<b>(B) Course Number*</b>	<p>If Dual Listed, enter both course numbers</p> <p>492 / 592</p>
<b>(C) Course Title*</b>	Soil Science: Archaeological and Geoenvironmental Applications
<b>(D) Course Level*</b>	graduate-level, undergraduate-level
<b>(E) Cross Listed*</b>	<p>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</p> <p>YES</p> <p>If YES, with:GEOS 492</p>
<b>(F) Variable Credit*</b>	<p>NO</p> <p>If YES, enter the number of credits:</p>
<b>(G) Variable Title*</b>	<p>NO</p> <p>If YES, enter the title(s):</p>
<b>(H) Number of Credits*</b>	<p>Class Hours:3</p> <p>Lab Hours:0</p> <p>Credits:3</p>
<b>(I) Prerequisite(s)</b>	none

<b>(J) Co-requisite (s)</b>	<p><i>This means that another course must be taken in the same semester as the proposed course</i></p> <p>none</p>
<b>(K) Additional Information</b>	<p><i>Check all that apply. Note: Additional documentation will be required</i></p> <p><i>* Teacher Education: Please complete the Teacher Education section of this form (below)</i></p> <p><i>* Liberal Studies: Please complete the Liberal Studies section of this form (below)</i></p> <p><i>* Distance Education: Please complete the Distance Education section of this form (below)</i></p>
<b>(L) Recommended Class Size</b>	<p>YES</p> <p>Number (Enter Zero if No):24</p> <p>If YES: (Check one of the following reasons and provide a narrative explanation)</p> <p>Physical Limitation of Classroom</p> <p>Explain (required):</p> <p>Need for special purpose classroom and equipment.</p>
<b>(M) Catalog Description*</b>	<p><i>Guidelines: Do not include pre/co-requisite information here. The registrar prefers a concise description of course content, beginning with an active verb.</i></p> <p>Introduces students to the ways in which archaeologists and geoscientists define, recognize, examine, and interpret soils in both the field and the laboratory. Examines (1) how the interactions of landform, topography, climate, and biota result in patterns of soil development and the distribution of soils that we observe within the landscape; (2) the significance of soils to other disciplines, including archaeology, Quaternary geology, and geoenvironmental science; and (3) how the physical, chemical and biological properties of soils are influenced by human activities both past and present. Includes field trips that may occur on weekends. (Also offered as GEOS 492; may not be taken for duplicate credit.)</p>

<p><b>(N) Student Learning Outcomes*</b></p>	<p><i>These should be measurable, appropriate to the course level, and phrased in terms of student achievement, not instructional or content outcomes</i></p> <p><i>If dual listed, indicate additional learning objectives for the higher level course.</i></p> <p>All students in the course will be able to:</p> <p>Objective 1: Differentiate between sediments and soils and understand the role of weathering and sedimentation in soil formation</p> <p>Objective 2: Describe soils both qualitatively according to standard USDA criteria, and quantitatively, using descriptive and comparative statistics</p> <p>Objective 3: Understand the role topography, climate, and biological organisms play in the formation of diverse soil types</p> <p>Objective 4: Obtain relevant geo-environmental data using soil maps and surveys, both the older paper editions, as well as newer online databases</p> <p>Objective 5: Understand the origin, classification, and distribution of soils and their relationship to people both past and present</p> <p>Objective 6: Develop an ethical framework to evaluate the use, management, sustainability, and conservation of soils by people both past and present.</p> <p>Graduate students will additionally be able to:</p> <p>Objective 7: Identify the soil-forming processes that form and destroy archaeological sites and critically evaluate the effect these have on archaeological interpretation</p> <p>Objective 8: Apply the most appropriate soils methods to answer a given research question in applied cultural resource management (CRM) contexts</p> <p>Objective 9: Design a realistic and professional soil survey or analysis in the form of an applied cultural resource management (CRM) project proposal</p> <p>Objective 10: Review a peer-reviewed journal article in the primary soil science literature (e.g., <i>CATENA</i>, <i>Geoarchaeology</i>, or <i>Soil Science</i>).</p>
<p><b>(O) Brief Course Outline*</b></p>	<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> <p>This course is divided into three modules. Module 1 describes the principles of weathering and sedimentation in the formation of soils. Module 2 focuses on the standard field and laboratory techniques used by geoscientists to assess soil development, fertility, and ability to support people through crop production. Module 3 exposes students to selected case studies involving the human use (and misuse) of soils both past and present.</p> <p><b>Module 1</b></p> <p>Weeks 1-2: Sediments and Weathering Processes</p> <p>Weeks 3: Soil and Soil Formation</p> <p>Weeks 4: Soil Texture, Structure and Water</p> <p>Weeks 5-6: Microbes and Nutrient Cycling</p> <p><b>Module 2</b></p> <p>Weeks 7-8: Soil Classification and Mapping</p> <p>Weeks 9-10: Field Techniques &amp; Research Methods</p> <p><b>Module 3</b></p> <p>Weeks 11-12: Soil Applications to Archaeology, Engineering and Land Use</p> <p>Weeks 13-14: Prehistoric and Contemporary Soil Pollution and Erosion</p>

<b>Rationale for Proposal</b>	
<b>(P) Why is this Course Being Proposed?*</b>	Soil Science has not been taught previously due to lack of faculty expertise. New faculty with interdisciplinary training/practice in geology, soils, and archaeology make this course possible. In addition, the area of soil science is an important growing knowledge base important to both geoscientists and archaeologists in understanding relationship between human use of the land and issues of sustainability.
<b>(Q) University Senate Summary of Rationale</b>	<p><i>Please enter a single paragraph summary/rationale of changes or proposal for University Senate.</i></p> <p>The proposed new course will expand the curriculum of both Anthropology and Geoscience. The area of soil science is an important growing knowledge base important to both geoscientists and archaeologists in understanding the relationship between human use of the land and issues of sustainability. The Department of Anthropology has the expertise to teach this course and it is supported by the Department of Geoscience.</p>
<b>(R) How Does it Fit into the Departmental Curriculum?*</b>	<p><i>Check all that apply</i></p> <p>Free Elective</p> <p>If Other, please explain:</p>
<b>(S) Is a Similar Class Offered in Other Departments?*</b>	<p>YES</p> <p>Please Provide Comment:</p> <p>Geoscience offers GEOS 313 Soils and Soil Geochemistry; this course is inappropriate for archaeology students lacking a chemistry background. A more general course on soils and human use and misuse of soils though time is relevant to both archaeologists and geoscientists, particularly those in compliance-related and/or sustainability sectors.</p>
<b>(T) Does it Serve the College /University Above and Beyond the Role it Serves in the Department?*</b>	<p>NO</p> <p>Please Provide Comment:</p>
<b>(U) Who is the Target Audience for the Course?*</b>	<p>Department Elective Open to Any Student Other</p> <p>If Other, please explain:</p> <p>Geoscience majors</p>
<b>(V) Implications for Other Departments*</b>	<p>A. What are the implications for other departments? (For Example: overlap of content with other disciplines, requirements for other programs)</p> <p>This course is beneficial to students in the Department of Geosciences and is supported by the chairperson and faculty in that department.</p> <p>B. How have you addressed this with other department(s) involved? What was the outcome of that attempt?</p> <p>Open communication with GEOS department faculty and chair, the latter who has written a letter of support for this course and its utility to their students.</p>

(W) Attach Supporting Documents for Implications, if Necessary	<b>File</b>	<b>Modified</b>
	PDF File GEOS_ support for curriculum proposals.pdf	Nov 10, 2015 by Benjamin L. Ford
(X) Are the Resources Adequate?*	<i>(i.e. faculty, space, equipment, laboratory supplies, library materials, travel funds, etc.)</i>	
	YES	
	Please Provide Comment:	

## Distance Education Section

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

<b>If Completing this Section, Check the Box to the Right:</b>	
<b>Course Prefix/Number</b>	
<b>Course Title</b>	
<b>Type of Proposal</b>	<i>See CBA, Art. 42.D.1 for Definition</i>
<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>
<b>Rationale for Proposal (Required Questions from CBA)</b>	
<b>How is/are the instructor(s) qualified in the Distance Education delivery method as well as the discipline?</b>	
<b>For each outcome in the course, describe how the outcome will be achieved using Distance Education technologies.</b>	

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:	<input type="checkbox"/>
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Liberal Studies Course Designations (Check all that apply)	
Learning Skills:	
Knowledge Area:	
Liberal Studies Elective	<i>Please mark the designation(s) that apply - must meet at least one</i>
Expected Undergraduate Student Learning Outcomes (EUSLOs)	<i>Describe how each Student Learning Outcome in the course enables students to become Informed Learners, Empowered Learners and/or Responsible Learners See <a href="http://www.iup.edu/WorkArea/DownloadAsset.aspx?id=181694">http://www.iup.edu/WorkArea/DownloadAsset.aspx?id=181694</a></i>
Description of the Required Content for this Category	<i>Narrative on how the course will address the Selected Category Content</i>
<p><b>All Liberal Studies courses are required to include perspectives on cultures and have a supplemental reading.</b></p> <p><b>Please answer the following questions.</b></p>	

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

**Teacher Education Section**

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

<p><b>If Completing this Section,</b></p> <p><b>Check the Box to the Right:</b></p>					
<p><b>Course Designations:</b></p>					
<p><b>Key Assessments</b></p>					
	<p>For both new and revised courses, please attach (see the program education coordinator):</p> <ul style="list-style-type: none"> <li>• The Overall Program Assessment Matrix</li> <li>• The Key Assessment Guidelines</li> <li>• The Key Assessment Rubric</li> </ul> <table border="1" data-bbox="412 1493 1276 1591"> <thead> <tr> <th data-bbox="412 1493 948 1535">File</th> <th data-bbox="948 1493 1276 1535">Modified</th> </tr> </thead> <tbody> <tr> <td data-bbox="412 1535 948 1591">PDF File GEOS_ support for curriculum proposals.pdf</td> <td data-bbox="948 1535 1276 1591">Nov 10, 2015 by Benjamin L. Ford</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Drag and drop to upload or <a href="#">browse for files</a> </li> </ul>	File	Modified	PDF File GEOS_ support for curriculum proposals.pdf	Nov 10, 2015 by Benjamin L. Ford
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<p><b>Narrative Description of the Required Content</b></p>	<p><i>How the proposal relates to the Education Major</i></p>				

**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 <http://ihelp.iup.edu>