

Proposal Status: Workflow Started

## FULL PROPOSAL: Substantive Change(s) to a Course

Title of proposal (must begin with department abbreviation): ESC4680 / BIOL4680 Introduction to Soils Resources, Request to change the credit hours number from 3 to 4

Place an X next to the ones that apply:

<input type="checkbox"/>	Significant modification of course content by the addition or removal of topics embodied in the original course proposal.
<input type="checkbox"/>	Changing the course number by multiples of 1000 (e.g., 1230 to 2230 or 4320 to 3320)
<input checked="" type="checkbox"/>	Changing the credit hours awarded for the course
<input type="checkbox"/>	Changing course prerequisites or corequisites
<input type="checkbox"/>	Creating a new course

Effective date: Fall 2015

Contact information:

Spokesperson Name: Jose Barbosa	Department: Biology & Env. Sciences
Building: Holt hall	Office Number: 114
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Faculty of the originating department approved this proposal on Friday, Oct. 10 - 2014 (date) by a vote of 24 aye votes; 0 nay votes; 0 abstentions; 5 eligible voting members absent

1. Description of proposed changes

ESC4680 / BIOL 4680 Introduction to Soil Resources

(Current number of credits "3" hours. Request to change to "4" hours)

2. Rationale for requested change

Include any information and/or data which is being used to justify the change(s)

In the last curriculum proposal (#13-070, 2012-2013), Introduction to Soil Resources was cross-listed between Environmental Sciences and Biology ESC / BIOL and was converted from a 2000 to 4000 level course. In addition, the numbers of weekly contact hours were increased for both lecture and lab. However, the number of credit hours assigned to the course were not changed. Students that enrolled in this course (Spring 2014) de facto worked for a 4 credit hours but only earned 3 credits. This request will allow students to earn the number of credits that correspond to the amount of work, number of weekly contact hours and required efforts to successfully finish the course.

3. Current course as listed in the Catalog

Prefix: ESC	Number: 4680
Title: Introduction to Soil Resources	Credit Hours: 3
Prerequisites: ESC151	Co-Requisites:

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Cross-listed courses: BIOL 4680	
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4. Current course description as listed in the Catalog

Introduction to the study of soils and exploration of fundamentals principles of origin, nature and constitution of soils. The geological origin of soils and factors of soil formation. Study of soil's physical, chemical and biological properties in determining the suitability of land for various uses. The environmental impact of agricultural and non-agricultural soil and land use. Soil erosion and conservation. The conquest of land through 7000 years and the impact human actions. Spring semester. Lecture 2 hours, Laboratory 2 hours. Prerequisites: Environmental sciences ESC151 with a minimum grade of C, or instructor approval. Laboratory/studio course fee will be assessed.

5. Proposed new course as it will be listed in the Catalog

Prefix: ESC	Number: 4680
Title: Introduction to Soil Resources	Credit Hours: 4
Prerequisites: ESC151	Co-Requisites:
Cross-listed courses: BIOL	

6. Proposed new description and program requirements to be listed in the Catalog (catalog copy)

Introduction to the study of soils and exploration of fundamentals principles of origin, nature and constitution of soils. The geological origin of soils and factors of soil formation. Study of soil's physical, chemical and biological properties in determining the suitability of land for various uses. The environmental impact of agricultural and non-agricultural soil and land use. Soil erosion and conservation. The conquest of land through 7000 years and the impact human actions. Spring semester. Lecture 3 hours, Laboratory 3 hours. Prerequisites: Environmental sciences ESC151 with a minimum grade of C, or instructor approval. Laboratory/studio course fee will be assessed.

7. What is the instructional method for the course (Please select one)?

Lecture - Face-to-face Classroom Instruction

8. How will this course be graded (Please select one)?

Standard letter grade

9. What are the pedagogical objectives of the course?

The objectives of the course are to help students to gain an appreciation for soil as one of the most valuable natural resources and understanding of the complexities related to soil formation. Be familiar with different factors that intervene in the process soil formation.

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Understand how human activities impact soil quality, accelerate soil degradation, and the need for conservation. Understand how soil quality affects life.

10. Outline the student learning outcomes—a statement of the minimum expectations of students as they complete the course. You must list at least three outcomes.

- Students will understand Soil's physical and chemical characteristics as important factors of soil identity and variability.

- Students should familiarize with common terminologies used in description and classification of soils factors properties of soils

-Students should familiarize with factors that contribute to soil erosion and methods of soil conservation

-Students will show an appreciation for human activities and land degradation

- Students will learn to appreciate how soil is the sustain of life

11. How will students be assessed on the learning outcomes?

Current, traditional forms of written and oral testing, short research projects with final presentation at the end of the semester. Written assignments of specific case studies.

12. If this course changes the program curriculum map, please attach a copy of the updated curriculum map here.

Please see the direction at the end of this proposal for how to upload your curriculum map document.

13. Provide additional information about the course including (a) how often the course is to be offered, (b) who will be the routing instructor or course coordinator, and (c) what steps will be taken by the department to ensure its continued coverage (current expertise and interest within the department).

The course is to be offered every other year.

Dr Jose Barbosa has been the only instructor for the course since

The course had not been taught for almost 10 years. It restarted since 2009/10 academic year and has been taught every other year. Most students enrolled in the course have been from environmental sciences, and environmental engineering programs. The interest in the course augmented after its reclassification cross listing. The number of students enrolled in the class should keep increasing.

14. Will the proposed changes require a change to the Clear Path Showcase (4-year plan)? If yes, please attach both current and revised clear path documents.

Please see the directions at the end of this proposal for how to upload your clear path document.

15. How will the proposed changes impact the ability of students to complete the degree requirements in a timely manner, and how will the proposed changes impact requirements in other departments or programs?

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The proposed change will not deter students from graduating. In the contrary by earning 1 more credit for the course should make it more attractive and helpful toward graduation.

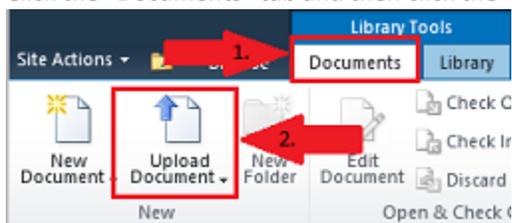
16. Will a laboratory/studio fee or other course fee be assessed? If yes, include a rationale for the fee assessment.

Yes. The laboratory component of the class will require deslocation to different sites to study in locus various aspects related to soil sciences. In addition, modest amount of chemical and some tools will be used in the course.

17. Does this change require new resources from the originating department or other departments (including the library)? If yes, please explain.  
NO

### Direction for uploading supporting documents:

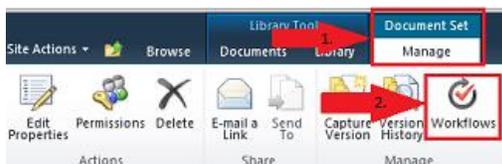
1. To upload your model syllabus to the folder for your proposal go to <https://spaces.utc.edu/sites/UndergraduateProposal>.
2. Next, click on the name of your proposal under "My Proposals".
3. Click the "Documents" tab and then click the "Upload Document" tab.



**Important:** After completing your proposal you must start the *Curriculum Proposal Workflow*.

To begin workflow:

1. Click on the name of your proposal below.
2. Next, click the "Document Set Manage" tab in the ribbon at the top of the page and select the "Workflows" button.



3. Under "Start a New Workflow" click "Curriculum Proposal Workflow" and then click the "Start" button.

### Workflow Sequence for Full Proposal – Course Changes

1. Department Head
2. College Curriculum Committee
3. College Dean

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4. Other Areas Affected (If any)
5. Records Office
6. Associate Provost
7. Provost (if a fee will be assessed)
8. Faculty Senate Curriculum Committee
9. Faculty Senate