

**From:** [noreply@wsu.edu](mailto:noreply@wsu.edu)  
**To:** [curriculum.submit](#)  
**Subject:** 586725 Environment Requirements Revise - Revise or Drop Graduate Certificate  
**Date:** Tuesday, June 2, 2020 11:10:52 AM  
**Attachments:** [2020.06.02.11.05.40.10.FormData.html](#)  
[2020.06.02.11.05.38.71.currentCatalogFile\\_20200415\\_CNSPIRE\\_revisions.pdf](#)

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Julie Padowski has submitted a request for a major curricular change. His/her email address is: [julie.padowski@wsu.edu](mailto:julie.padowski@wsu.edu).

**Requested change:** Revise or Drop Graduate Certificate

**Title:** C-NSPIRE: Carbon and Nitrogen Systems Policy-Oriented Integrated Research and Education

**Requested Effective Date:** Fall 2021

**Revise certificate requirement:** Yes

**Dean:** Zack, Rich - Interim Assoc Dean - CAHNRS, Rodriguez-Vivaldi, Ana Maria - Assoc Dean - CAS

**Chair:** Carter, Pat,

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Catalog Subcommittee  
Approval Date

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AAC, PHSC, or GSC  
Approval Date

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Faculty Senate  
Approval Date

**From:** [Carter, Patrick Andrew](#)  
**To:** [curriculum.submit](#)  
**Cc:** [Zack, Richard Stanly, Jr](#)  
**Subject:** RE: 586725 Environment Requirements Revise - Revise or Drop Graduate Certificate  
**Date:** Thursday, June 4, 2020 8:45:58 AM

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**1. I approve this proposal in its current form.**

Pat

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**From:** curriculum.submit@wsu.edu <curriculum.submit@wsu.edu>  
**Sent:** Tuesday, June 2, 2020 11:06 AM  
**To:** Carter, Patrick Andrew <pacarter@wsu.edu>  
**Cc:** Zack, Richard Stanly, Jr <zack@wsu.edu>  
**Subject:** 586725 Environment Requirements Revise - Revise or Drop Graduate Certificate

Carter, Pat,

Zack, Rich - Interim Assoc Dean - CAHNRS,

Julie Padowski has submitted a request for a major curricular change.

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**Title:** C-NSPIRE: Carbon and Nitrogen Systems Policy-Oriented Integrated Research and Education

**Requested Effective Date:** Fall 2021

**Revise certificate requirement:** Yes

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Both Chair and Dean approval is required to complete the submission process. Please indicate that you have reviewed the proposal by highlighting one of the statements below and **reply all** to this email. ([curriculum.submit@wsu.edu](mailto:curriculum.submit@wsu.edu).) [Details of major change requested can be found in the attached supplemental documentation]

**1. I approve this proposal in its current form.**

2. I approve this proposal with revisions. Revisions are attached.

3. I do not approve this proposal. Please return to submitter.

If you do not respond within one week, you will be sent a reminder email. If no response is received within three weeks of the submission date, the proposal will be returned to the submitter.

**From:** [Zack, Richard Stanly, Jr](#)  
**To:** [curriculum.submit](#); [Carter, Patrick Andrew](#)  
**Subject:** Re: 586725 Environment Requirements Revise - Revise or Drop Graduate Certificate  
**Date:** Tuesday, June 2, 2020 12:33:35 PM

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Approved

Rich Zack

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**From:** "curriculum.submit@wsu.edu" <curriculum.submit@wsu.edu>  
**Date:** Tuesday, June 2, 2020 at 11:10 AM  
**To:** "Carter, Patrick Andrew" <pacarter@wsu.edu>  
**Cc:** "Zack, Richard Stanly, Jr" <zack@wsu.edu>  
**Subject:** 586725 Environment Requirements Revise - Revise or Drop Graduate Certificate

Carter, Pat,

Zack, Rich - Interim Assoc Dean - CAHNRS,

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## Supporting Documentation for C-NSPIRE Graduate Certificate Changes

The C-NSPIRE Graduate Program is seeking changes to its required and elective course requirements based on evolving availability of courses relevant to participating students. These changes are an update reflecting the evolving availability of related and appropriate departmental offerings since the certificate was first proposed.

1. Changes to required courses: Currently, students are required to take four courses (BIO 569, BIO 593, SOE 550 and POL\_SCI 430, 514, 590 or 591). Of these, BIO 593, a seminar course, is now offered too infrequently and is therefore no longer a viable option to serve as a requirement. The C-NSPIRE committee has agreed to remove it from the set of required courses (Table 1). This would reduce the total required credits for this certificate from 10 cr. to 9 cr. In addition, SOE courses were renamed, and we would like to reflect that change.

*Table 1. Current and proposed required courses for the C-NSPIRE Graduate Certificate. This change would remove BIO 593 from the list of required courses (struckthrough), and update a current course name (underlined).*

### Current and Proposed Required Courses

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BIO 569- Ecosystem Ecology & Global Change (3 cr.)

~~BIO 593- Seminar: Literature and Problems (1 cr.)~~

~~SOE 550- Modeling the Environment (3 cr.)~~

SOE 555- System Dynamics Models of Environmental Systems (3 cr.)

POL\_SCI 430 (3 cr.), 514 (3 cr.) 590 –OR—591 (each 2 cr.)

2. Changes to elective courses: We request that seven elective courses be added to the existing list available to students pursuing this certificate (Table 2), and one course be removed since it is no longer offered (CE 555). These revisions to the elective course options available will increase the number of students who can pursue an interdisciplinary understanding of carbon and nitrogen systems. All the courses have been approved by the C-NSPIRE committee. The minimum total number of credits needed to fulfill this elective requirement would not change, remaining at 3 cr. We will also make it clear to students on our webpage that only one (1) 400-level course may be used to fulfill the requirements of this certificate.

*Table 2. Current and proposed (underlined) elective courses for the C-NSPIRE Graduate Certificate. The one current elective to be removed is struckthrough.*

### Current and Proposed Elective Courses

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SOIL\_SCI 441- Soil Fertility (3 cr.)

SOIL\_SCI 514 Environmental biophysics (2 cr.)  
SOIL\_SCI 515 Environmental biophysics lab (1 cr.)  
SOIL\_SCI 541- Soil-Plant Microbial Interactions (3 cr.)  
SOE 562- Watershed Biogeochemistry (3 cr.)  
~~CE 555 Natural Treatment Systems (3 cr.)~~  
BIO 593 Seminar- Literature and Problems (1 cr.)  
CE 515 Environmental Measurements (3 cr.)  
CE 517 Mechanics of Sediment Transport (3 cr.)  
CE 550 Hydroclimatology (3 cr.)  
SOE 512 [M] Global Biogeochemistry (3 cr.)  
SOE 516 Soil Processes in the Earth's Critical Zone (3 cr.)  
SOE 577 Advanced Environmental Hydrology (3 cr.)