

**From:** [noreply@wsu.edu](mailto:noreply@wsu.edu)  
**To:** [curriculum.submit](#)  
**Subject:** 128 467373 Environment Requirements Revise - Revise or Drop Graduate Plan  
**Date:** Thursday, September 27, 2018 9:57:34 AM  
**Attachments:** [2018.09.27.09.57.30.12.FormData.html](#)  
[2018.09.27.09.57.29.12.currentCatalogFile Requirement Change MS ES Vancouver NonthesisOption.pdf](#)

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Alecia Hoene has submitted a request for a major curricular change. His/her email address is: [alecia.hoene@wsu.edu](mailto:alecia.hoene@wsu.edu).

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

**Degree:** M.S. Environmental Science

**Title:** Non-Thesis [CSC Note: Change requested is for MS in ES WSU-Vancouver]

**Requested Effective Date:** Fall 2019

Revise plan requirement: Yes

**Dean:** Rodriguez-Vivaldi, Ana Maria - Assoc Dean - CAS,

**Chair:** Keller, Kent,

_____	_____	_____
Catalog Subcommittee Approval Date	AAC, PHSC, or GSC Approval Date	Faculty Senate Approval Date

**From:** [Keller, Kent](#)  
**To:** [curriculum.submit](#)  
**Cc:** [Hoene, Alecia](#)  
**Subject:** Re: 128 467373 Environment Requirements Revise - Revise or Drop Graduate Plan  
**Date:** Thursday, October 4, 2018 11:41:56 AM

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Yes, please move forward, and thanks for following up with me. -Kent.

On Oct 4, 2018, at 7:49 AM, curriculum.submit <[curriculum.submit@wsu.edu](mailto:curriculum.submit@wsu.edu)> wrote:

Kent,

I don't see that I've received a response from you on this submission. OK to move forward?

*Suzanne*

Suzanne Lambeth, Assistant Registrar  
Graduations, Curriculum, and Scheduling

This communication may contain privileged, non-public or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

**From:** [noreply@wsu.edu](mailto:noreply@wsu.edu) <[noreply@wsu.edu](mailto:noreply@wsu.edu)>  
**Sent:** Thursday, September 27, 2018 9:58 AM  
**To:** curriculum.submit <[curriculum.submit@wsu.edu](mailto:curriculum.submit@wsu.edu)>  
**Subject:** 467373 Environment Requirements Revise - Revise or Drop Graduate Plan

Alecia Hoene has submitted a request for a major curricular change. His/her email address is:  
[alecia.hoene@wsu.edu](mailto:alecia.hoene@wsu.edu).

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

**Degree:** M.S. Environmental Science

**Title:** Non-Thesis

**Requested Effective Date:** Fall 2019

Revise plan requirement: Yes

**Dean:** Rodriguez-Vivaldi, Ana Maria - Assoc Dean - CAS,

**Chair:** Keller, Kent,

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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

<2018.09.27.09.57.29.12.currentCatalogFile\_Requirement\_Change\_MS\_ES\_Vancouver\_NonthesisOption.pdf>

C. Kent Keller  
Professor and Director  
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*It is safer to have a whole people respectably enlightened than a few in a high state of science and the many in ignorance. - T. Jefferson*

**From:** [Rodriguez-Vivaldi, Ana Maria](#)  
**To:** [curriculum.submit](#); [Keller, Kent](#)  
**Subject:** RE: 128 467373 Environment Requirements Revise - Revise or Drop Graduate Plan  
**Date:** Thursday, September 27, 2018 12:53:40 PM

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I approve this proposal in its current form.

Ana María Rodríguez-Vivaldi

**From:** curriculum.submit@wsu.edu [mailto:curriculum.submit@wsu.edu]  
**Sent:** Thursday, September 27, 2018 9:58 AM  
**To:** Keller, Kent <ckkeller@wsu.edu>; Rodriguez-Vivaldi, Ana Maria <amrodriguez@wsu.edu>  
**Subject:** 467373 Environment Requirements Revise - Revise or Drop Graduate Plan

Keller, Kent,

Rodriguez-Vivaldi, Ana Maria - Assoc Dean - CAS,

Alecia Hoene has submitted a request for a major curricular change.

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

**Degree:** M.S. Environmental Science

**Title:** Non-Thesis

**Requested Effective Date:** Fall 2019

Revise plan 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.

## **Current and Proposed Requirements for Master of Science in Environmental Sciences Offered at WSU Vancouver: Non-Thesis Option**

As requested, degree requirements that would be eliminated under the proposed revisions are marked with strikethrough, and new requirements are underlined. Requirements without strikethrough or underlining are unchanged.

Most of the changes below are identical to those outlined in the corresponding Thesis Option degree revisions. Boxes have been used to highlight those changes that differ from the thesis option.

### **Ungraded Credits**

SOE 501 Graduate Skills Seminar course: 1 credit.

SOE 598 Research Seminar in Environmental Sciences: 2 credits  
(i.e. 2 semesters, at 1 credit per semester).

SOE 700 Thesis: 4 credits

At least 2 credits must be in the semester of the final exam.

All full-time students must take at least 1 credit of SOE 700 during every semester they are enrolled in the degree.

### **Graded Credits:**

~~Advanced Special topics: 2 credits~~

Advanced special topics: 2 credits of advanced SOE special topics coursework.

(Current options for special topics are

SOE 592 Advanced Topics in Environmental and Natural Resources Sciences and  
SOE 597 Advanced Topics in Geology)

~~544 Environmental Assessment: 4 credits~~

Policy/Society/Management Courses: 3 credits.

This requirement could be met by 544 Environmental Assessment, or by other courses in Policy, Society, or Management.

Quantitative skills: 3 credits

This requirement could be met by courses in mathematics, statistics (e.g. STAT 519, 523), or other highly quantitative courses.

~~Applied Biological, Physical, or Social Science area: 3 credits~~

~~In the past, this was usually met by one of GEOL 516, GEOL 565, ENVR\_SCI 577, ENVR\_SCI 586, POL\_S 430~~

~~Ecology: 3 credits~~

~~In the past, this was usually met by one of BIOL 562, 568, 569~~

Area of Specialization: 11 credits

Other Graded Coursework: 18 credits

There are 24 total credits included in the above "Policy/Society/Management", "Quantitative", and "Other" groupings. Of these 24, at least 6 must be SOE credits.

Total Graded coursework: 26 credits minimum

Total Credits: ~~32~~ 33

No-more than 6 hours of non-graduate 300 or 400-level courses may be included.

### **Course List for proposed revised MS ES requirements**

This document lists courses that might satisfy proposed revised requirements for the MS ES offered at WSU Vancouver. Not all these courses are currently available in Vancouver.

#### List of graduate courses currently satisfying Policy/Society/Management requirement:

SOE 544 Environmental Assessment,  
SOE 535 Water Resources Science and Management,  
SOE 540 540 Agroecology,  
SOE 545 Hazardous Waste Management,  
SOE 594 Environmental and Natural Resources Issues and Ethics,  
POL\_S 544 The Politics of Policy Process.

#### List of graduate courses currently satisfying Quantitative skills requirement:

STAT 508 Environmental Spatial Statistics  
STAT 510 Topics in Probability and Statistics  
STAT 511 Statistical Methods for Graduate Researchers  
STAT 512 Analysis of Variance of Designed Experiments  
STAT 516 Time Series  
STAT 519 Applied Multivariate Analysis  
STAT 520 Statistical Analysis of Qualitative Data  
STAT 523 Statistical Methods for Engineers and Scientists

STAT 535 Regression Analysis  
STAT 544 Applied Stochastic Processes  
MECH 521 Fundamentals of Fluids I  
MECH 523 Computational Fluid Dynamics and Heat Transfer  
MECH 532 Finite Elements

List of graduate courses satisfying 6-SOE-credit requirement

505 Geodynamics  
510 Species Distribution Modeling  
512 [M] Global Biogeochemistry  
516 Soil Processes in the Earth's Critical Zone  
520 Radiation Instrumentation  
521 Uses and Regulation of Radiation  
524 Advanced Topics in Sedimentology  
531 Fundamentals of Environmental Toxicology  
532 Applied Environmental Toxicology  
535 Integrated Water Resources Science and Management  
540 Agroecology  
541 Orogenic Systems  
542 Extensional Tectonics  
544 Environmental Assessment  
545 Hazardous Waste Management  
548 Applied Spatial Ecology  
555 System Dynamics Models of Environmental Systems  
556 Foraging Ecology of Herbivores  
560 Advanced Igneous Petrology  
562 Watershed Biogeochemistry  
577 Advanced Environmental Hydrology  
583 Radiogenic Isotopes and Geochronology  
584 Stable Isotope Geochemistry  
594 Environmental and Natural Resources Issues and Ethics