

October 18, 2012

Dean Lisa J. Graumlich  
College of the Environment  
Box 355679

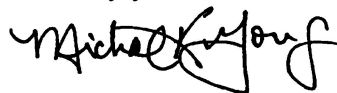
Dear Lisa:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the revised program requirements for the minor in Climate Science. A copy of the change is attached.

I am writing to inform you that the College of the Environment is authorized to specify these requirements beginning autumn quarter 2012.

The new requirements should be incorporated in printed statements and in individual department websites as soon as possible. The *General Catalog* website will be updated accordingly by the Registrar's Office.

Sincerely yours,



Michael K. Young  
President

Enclosure

cc: Dr. Miriam Bertram (with enclosure)  
Ms. Michelle Hall (with enclosure)  
Mr. Robert Corbett (with enclosure)  
Dr. Deborah H. Wiegand (with enclosure)  
Ms. Virjean Edwards (with enclosure CENV-20120514)



UNIVERSITY OF WASHINGTON

# CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

JUN 01 2012

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Control #

CENU-20120511

After college/school/campus review, send a signed original and 1 copy to the Curriculum Office/FCAS, Box 355850.

For information about when and how to use this form: <http://depts.washington.edu/uwcr/1503instructions.pdf>

<b>College/Campus</b> College of the Environment	<b>Department/Unit</b> Program on Climate Change	<b>Date</b> 5/14/2012
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### New Programs

- Leading to a Bachelor of \_\_\_\_\_ in \_\_\_\_\_ degree.
- Leading to a Bachelor of \_\_\_\_\_ degree with a major in \_\_\_\_\_.
- Leading to a \_\_\_\_\_ Option within the existing major in \_\_\_\_\_.
- Leading to a minor in \_\_\_\_\_

### Changes to Existing Programs

- New Admission Requirements for the Major in \_\_\_\_\_ within the Bachelor of \_\_\_\_\_.
- Revised Admission Requirements for the Major in \_\_\_\_\_ within the Bachelor of \_\_\_\_\_.
- Revised Program Requirements for the Major in \_\_\_\_\_ within the Bachelor of \_\_\_\_\_.
- Revised Requirements for the Option in \_\_\_\_\_ within the major in \_\_\_\_\_.
- Revised Requirements for the **Minor in Climate Science**

### Other Changes

- Change name of program from \_\_\_\_\_ to \_\_\_\_\_.
- New or Revised Continuation Policy for \_\_\_\_\_.
- Eliminate program in \_\_\_\_\_.

Proposed Effective Date: **Quarter:**  Autumn  Winter  Spring  Summer **Year: 2012** \_\_

Contact Person: Miriam Bertram	Phone: 3-6521	Email: mbertram@ocean.washington.edu	Box: 355351
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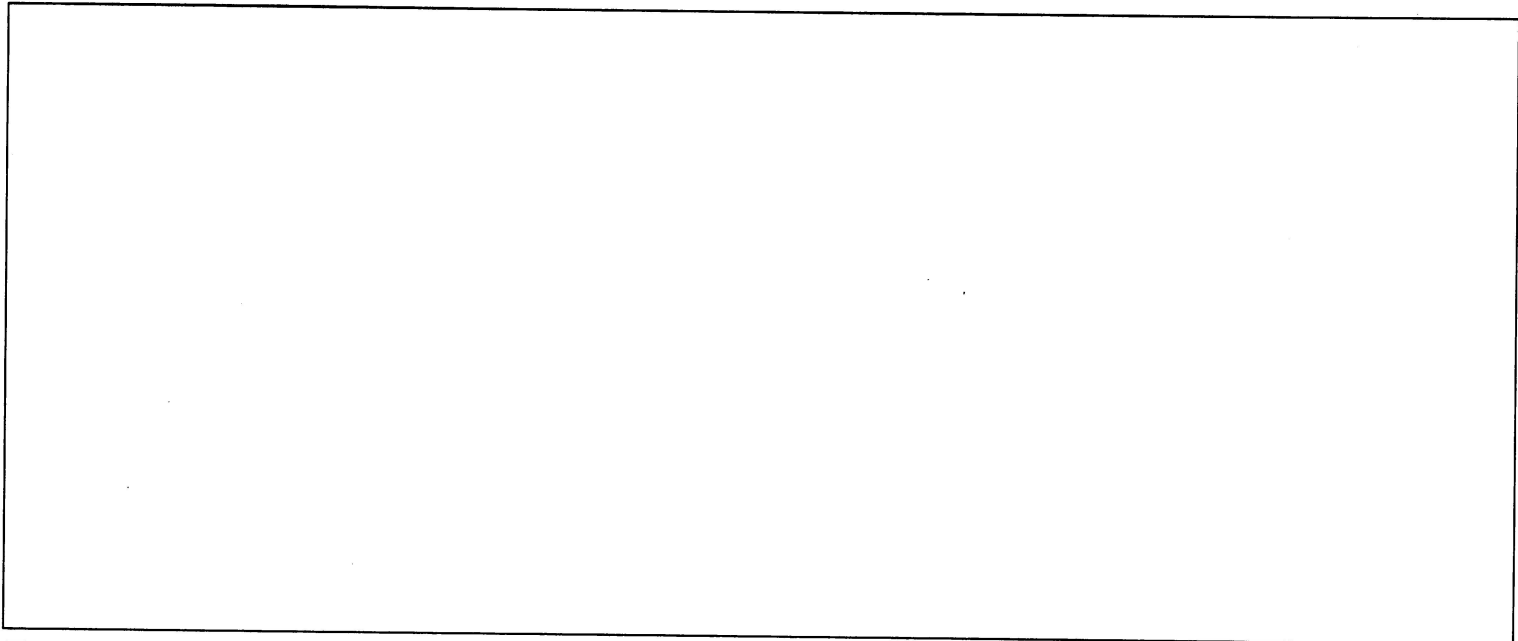
### EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE

For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary).

1. Updating the title of the "Past Climate" elective category to read "Past Climate and Ice" allows this important component of the climate system to be highlighted in the minor.
2. New courses are being offered in several departments that fulfill the learning goals of the climate minor and broaden the reach and scope of the curriculum. We propose the courses below be added to the list of electives available to students pursuing the minor, giving the minor added value to students interested in engineering, policy, etc.:

OCEAN 497 (3 credits) "The Changing Arctic Ocean" to the "Past Climate and Ice" Electives  
 CEE 498C (4 credits) "Interdisciplinary Watershed Hydrology: Case Study of the Cedar River Watershed" to Policy Elective  
 SMEA 521 (3 credits) "Governmental Responses to Climate Change" to Policy Elective

3. Biology 497 should be removed from the list, as it is no longer taught. It has been replaced by BIOL 315, Biological Impacts on Climate Change (3 credits). Please add Bio 315.



APPROVALS	
Chair/Program Director: <i>LuAnne Linn</i>	Date: 5/15/2012
College/School/Campus Curriculum Committee: <i>Susan Heubel</i>	Date: 5/15/2012
Dean/Vice Chancellors: <i>Ken Gramm</i>	Date: 5/30/12
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair: <i>Sharon Zittel</i>	Date: 6/12/2012
POST TRI-CAMPUS APPROVAL (when needed)	
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date:

**Michelle R. Hall**

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**From:** LuAnne Thompson <luanne@u.washington.edu>  
**Sent:** Tuesday, May 15, 2012 3:13 PM  
**To:** Michelle R. Hall  
**Subject:** Re: Interdisciplinary hydrology class next fall (fwd)

Here is the correspondence from CEE about the CEE course.

LuAnne

LuAnne Thompson  
Professor Oceanography  
Adjunct Professor Physics  
Adjunct Professor Atmospheric Sciences

University of Washington  
Work: 206 543 9965  
Cell: 206 676 2685

----- Forwarded message -----

Date: Wed, 25 Apr 2012 09:57:41 -0700  
From: Jessica Lundquist <jdlund@u.washington.edu>  
To: LuAnne Thompson <luanne@u.washington.edu>,  
M. Bertram <mbertram@ocean.washington.edu>  
Subject: Re: Interdisciplinary hydrology class next fall

Thank you so much! I appreciate it.

On 4/25/2012 9:31 AM, LuAnne Thompson wrote:

> We have listed it as an elective option for the climate minor, so I  
> hope that will bring in a few students for you.

>

> LuAnne

>

>

> LuAnne Thompson  
> Professor Oceanography  
> Adjunct Professor Physics  
> Adjunct Professor Atmospheric Sciences

>

> University of Washington  
> Work: 206 543 9965  
> Cell: 206 676 2685

>

> On Mon, 16 Apr 2012, Jessica Lundquist wrote:

>  
>> I'm definitely hoping to teach it long term (or to have it offered  
>> each year with the specific watershed changing based on instructor  
>> and interest -- could imagine a great class on the Skagit or Elwa or Duwamish as well).  
>> However, long term teaching depends critically on drumming up  
>> enrollment for this offering, so please do encourage people to sign up.  
>>  
>> On 4/16/2012 12:03 PM, LuAnne Thompson wrote:  
>>> I would like to consider this for the minor in climate science. Is  
>>> this a course that you are likely to teach more than once?  
>>>  
>>> LuAnne  
>>>  
>>>  
>>> LuAnne Thompson  
>>> Professor Oceanography  
>>> Adjunct Professor Physics  
>>> Adjunct Professor Atmospheric Sciences  
>>>  
>>> University of Washington  
>>> Work: 206 543 9965  
>>> Cell: 206 676 2685  
>>>  
>>> On Mon, 16 Apr 2012, Jessica Lundquist wrote:  
>>>  
>>>> LuAnne and Miriam,  
>>>>  
>>>> Hi! I'm attaching a flyer for an interdisciplinary hydrology class  
>>>> I'm teaching next fall. I'll be covering climate change  
>>>> specifically for a week, but the overall goal will be to focus on  
>>>> how we need to combine lots of different traditional disciplines to  
>>>> understand one watershed (the Cedar River which provides drinking  
>>>> water for Seattle). It should be fun and hopefully of interest to PCC-type students.  
>>>>  
>>>> Thanks,  
>>>> Jessica  
>>>>  
>>>> --  
>>>>  
>>>> \_\_\_\_\_  
>>>> Jessica Lundquist  
>>>> Associate Professor  
>>>> Civil and Environmental Engineering University of Washington Wilcox  
>>>> 165 Box 352700 Seattle, WA 98195-2700  
>>>>  
>>>> phone: 206-685-7594  
>>>> fax: 206-685-3836  
>>>> [jdlund@u.washington.edu](mailto:jdlund@u.washington.edu)  
>>>>

## **Michelle R. Hall**

---

**From:** LuAnne Thompson <luanne@u.washington.edu>  
**Sent:** Tuesday, May 15, 2012 3:13 PM  
**To:** Michelle R. Hall  
**Subject:** Re: A graduate course entitled Governmental Responses to Global Climate Change (SMEA 521) (fwd)

Here is the correspondence about the SMEA course. As you can see, they are supportive of including it in the minor. I will forward the correspondence from CEE next.

LuAnne

LuAnne Thompson  
Professor Oceanography  
Adjunct Professor Physics  
Adjunct Professor Atmospheric Sciences

University of Washington  
Work: 206 543 9965  
Cell: 206 676 2685

----- Forwarded message -----

Date: Wed, 21 Sep 2011 08:13:13 -0700 (PDT)  
From: nives@u.washington.edu  
To: LuAnne Thompson <luanne@u.washington.edu>  
Cc: Thomas M Leschine <tml@u.washington.edu>, Michele Berg <mpberg@u.washington.edu>  
Subject: Re: A graduate course entitled Governmental Responses to Global Climate Change (SMEA 521)

Dear LuAnne,

thank you and the members of the PCC executive committee for the expeditious review of the course. Your graduate students could productively contribute to the class discussions, so please advertise this course to them.

I am sending a cc of this message to our SMEA student adviser, Ms. Michele Berg for her records, as she will be issuing add codes for your students who decide to take the course.

Best, Nives

On Tue, 20 Sep 2011, LuAnne Thompson wrote:

> The PCC executive committee approves this as one of the electives for  
> the certificate. If you want more students for this fall, I can  
> advertise it to our current grad students. Let me know if you want me to do this.

>  
> LuAnne

>  
> LuAnne Thompson

> Professor Oceanography

> Adjunct Professor Physics

> Adjunct Professor Atmospheric Sciences

>  
> University of Washington

> Work: 206 543 9965

> Cell: 206 676 2685

>  
> On Tue, 20 Sep 2011, nives@u.washington.edu wrote:

>  
>> Hi LuAnne,

>>  
>> thank you for your prompt reply. As you suggested, I have also  
>> chatted with Clare about the links to the PoE curriculum. Let's get  
>> together later in the quarter for a cup of coffee/tea to chat more  
>> about various ways of building up the interdisciplinary aspect of the  
>> course. I can then share my current syllabus with you as one of  
>> potential starting points for these conversations.

>>  
>> Best, Nives

>>  
>> On Tue, 20 Sep 2011, LuAnne Thompson wrote:

>>  
>>> This looks good! Will talk with some other folks about putting this  
>>> into the certificate mix as one of our electives. I want to pass  
>>> this by a few other people to make sure i have buy in.

>>>  
>>> The climate minor is easier, I can add it to the list of potential  
>>> electives pretty easily.

>>>  
>>> About the interdisciplinary opportunity within the college, it may  
>>> make sense to talk with Clare Ryan as well (director of the program  
>>> on the  
>>> environment) about whether POE students would be interested. There  
>>> is a large student body in that program.

>>>  
>>> Will try to get back to you soon about using this course to fulfill  
>>> a certificate requirement, and we can have further conversations  
>>> about the interdisciplinary opportunity later in the quarter.

>>>  
>>> LuAnne

>>>>

>>>> 4.The future of the global climate change policies

>>>>

>>>> Hope to have some conversations with you in the future about the  
>>>> role this course may play in the graduate certificate and,  
>>>> potentially, in the undergraduate minor. I would also like to  
>>>> explore options for developing this course further, maybe with the  
>>>> CoE new support for interdisciplinary, cross-unit course. Please let me know if you have any thought on  
this.

>>>>

>>>> Best regards,

>>>> Nives

>>>>

>>>>

>>>>

>>>> Nives Dolsak

>>>> School of Marine Affairs and

>>>> Interdisciplinary Arts and Sciences nives@uw.edu

>>>> <http://faculty.washington.edu/nives/>

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>>>

>>>

>>> LuAnne Thompson

>>> Professor Oceanography

>>> Adjunct Professor Physics

>>> Adjunct Professor Atmospheric Sciences

>>>

>>> University of Washington

>>> Work: 206 543 9965

>>> Cell: 206 676 2685

>>>

>>> On Tue, 20 Sep 2011, nives@u.washington.edu wrote:

>>>

>>>> Dear LuAnne,

>>>>

>>>> I have learned that you are supervising the certificate and the  
>>>> minor in climate change. I wanted to let you know that I will be  
>>>> teaching a course entitled Governmental responses to climate change  
>>>> (SMEA521) this fall and, most likely, in the future years. As you  
>>>> may know, Ed Miles developed this course and taught it with his  
>>>> colleagues from the climate impacts group. I will continue the  
>>>> interdisciplinary approach to teaching this course and hope to get you interested in joining us with a  
guest lecture sometime.

>>>>

>>>> Also, I was hoping teh certificate students would have an  
>>>> opportunity to take the course. If there are any advanced  
>>>> undergraduate students in the minor who you believe would benefit  
>>>> from this course, I would be happy to give them permission to take the course.  
>>>> This fall, the course will cover the following topics:

>>>>

>>>> 1. Definition of the problem

>>>> 1.1 Carbon Cycle

>>>> 1.2 Assessment tools: Global and Regional Models

>>>> 1.3 Global Climate Change Impacts

>>>> 1.4 Framing of the global climate change policy

>>>>

>>>> 2. Technology of solutions

>>>> 2.1 Technologies for mitigation

>>>> 2.2 Technologies for adaptation

>>>>

>>>> 3. Institutions for the solutions

>>>> 3.1 The International regime: the UNFCCC

>>>> 3.2 Principles: Effectiveness, Equity, Efficiency

>>>> 3.3 Implementation of the UNFCCC and its protocols

>>>> 3.4 Implementation in the United States

>>>> 3.4.1 The EPA, the White House, and the Congress

>>>> 3.4.2 Sub-national governments: states, counties, cities

>>>> 3.4.3 Collaborative responses