



OFFICE OF THE PRESIDENT

June 3, 2010

Interim Dean Dennis Hartmann
College of the Environment
Box 355679

Dear Dennis:

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 and Bachelor of Arts degree in Environmental Studies. A copy of the changes is attached.

I am writing to inform you that the Program on the Environment is authorized to specify these requirements beginning autumn quarter 2010.

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,

A handwritten signature in black ink, appearing to read "Mark A. Emmert".

Mark A. Emmert
President

Enclosure

cc: Ms. Michelle Hall (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah H. Wiegand (with enclosure)
Mr. Todd Mildon, J.D. (with enclosure ENVIR-20100504)



UNIVERSITY OF WASHINGTON

**CREATING AND CHANGING UNDERGRADUATE
ACADEMIC PROGRAMS**

After college/school/campus review, send a signed original and 8 copies to the Curriculum Office/FCAS, Box 355850.

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

MAY 10 2010

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Control #

ENVIR - 2010 0504

College/Campus Environment / Seattle**Department/Unit** Program on the
Environment**Date** 5/4/2010**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 Environmental Studies within the Bachelor of Arts.
- ☐ Revised Requirements for the Option in _____ within the major in _____.
- ☒ Revised Requirements for the Minor in Environmental Studies.

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: 20 10**

Contact Person: Michelle Hall

Phone: 616-
1208

Email: hallm@uw.edu

Box: 355679

EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGEFor 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).*

Based on feedback from the Program on the Environment (PoE) Faculty Advisory Board, PoE would like to revise the requirements for the B.A. and Minor in Environmental Studies. Please see attached for additional information.

OTHER DEPARTMENTS AFFECTED

List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions.

Department/Unit:

See attached. [REDACTED]

Chair/Program Director:

Date: .

Department/Unit:

Chair/Program Director

Date:

CATALOG COPY

Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.

See attached.

PROPOSED CATALOG COPY

Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications).
Please note: all copy will be edited to reflect uniform style in the General Catalog.

See attached.

APPROVALS

Chair/Program Director:

Date:

7 May 2010

College/School/Campus Curriculum Committee:

Date:

7 May 2010

Dean/Vice Chancellor:

Date:

5/14/10

Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:

Date:

5/28/2010

POST TRI-CAMPUS APPROVAL (when needed)

Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:

Date:

Rationale and Summary of Proposed Changes to B.A. and Minor in Environmental Studies:

Based on feedback from the Program on the Environment (PoE) Faculty Advisory Board, PoE would like to make the following changes to requirements for the B.A. in Environmental Studies. These proposed changes should clarify the requirements, and strengthen the rigor of the curriculum and the foundational coursework upon which students will build their upper-level coursework and Capstone Experience work.

- Change the Statistics Foundational Course requirement to a Quantitative Methods requirement, to consist of one Statistics course and one additional Quantitative Methods course to be chosen from a list of approved courses, which will include many of the courses on the current Tools & Technologies course list.
- Increase the number of credits required in the Earth Systems Literacy requirement from 3-5 to 10.
- Increase the number of credits required in the Values and Cultures requirement from 10 to 15.
- Delete the Tools & Technologies requirement, now part of the 30-credit Perspectives and Experiences requirement, which will be streamlined to simply require one course (3 credit minimum) in each Perspectives and Experiences category, because the goals of the Tools and Technology requirement will now be met by the new Quantitative Methods requirement.
- Change the name of the Global Studies & Experiences requirement to the International Experiences requirement.
- Increase the number of Perspectives and Experiences credits that must be at the 300 or 400 level from 20 to 25.
- Change the GPA requirement to delete the allowance for an average GPA of 2.0 across the biology, chemistry, and statistics courses (rather than the minimum 2.0 grade required for all other courses presented for the major).

PoE would like to make the following changes to requirements for the Minor in Environmental Studies:

- Add one course required from the approved list for Values and Cultures .
- Decrease the total number of Perspectives and Experiences courses required for the Minor from 20 to 15.

Current Catalog Copy:

Bachelor of Arts

Suggested First and Second-Year College Courses: ENVIR 100, ENVIR 200, ENVIR 250, and all foundational courses listed below.

Program Admission Requirements

Students in good academic standing can declare this major at any time.

General Education Requirements

All majors must satisfy the College of Arts and Sciences the Environment general education requirements.

Major Requirements

~~93-95~~ 110 credits, as follows:

Core Courses (20 credits)

1. ENVIR 100, ENVIR 200, ENVIR 250, ENVIR 300

Foundational Courses (~~33-35~~ 50 credits)

1. Biology (10 credits): BIOL 180 and one course (or sequence) from among BIOL 200, BIOL 118/BIOL 119, BIOL/FISH/OCEAN 250
2. Chemistry (5 credits): CHEM 120
3. Earth Systems Literacy (~~3-5~~ 10 credits):

Climate: One course from among ATM S 211 or, ESS 201, ~~ESS 230/OCEAN 230, GEOG 205, OCEAN 200~~

Land, Water, or Atmosphere: One course from ATM S 212, ESS 210, ESS/OCEAN 230, OCEAN 200/201, GEOG 205

4. ~~Statistics~~ Quantitative Methods (~~5-10~~ credits): One course from among Q SCI 381, STAT 220, STAT 311 AND one course from approved list (see department Web site or advising office for list).
5. Values and Cultures (~~10-15~~ credits): ~~Two-Three~~ courses from among ANTH 210, ECON/ENVIR/ESRM 235, HSTAA/ENVIR 221, and ENVIR/PHIL 243. With adviser approval, students may substitute related courses, including courses previously listed as approved to meet this requirement.

Environmental Perspectives and Experiences (30 credits)

1. Minimum 30 credits from the list of approved courses (see department Web site or advising office for list). Minimum three credits in each of the six following categories: Perspectives - human and social dimensions; natural sciences; and policy and decision making; Experiences - bioregional; international; and fieldwork. Courses must satisfy the perspectives and experiences sub-requirements shown below. At least 25 of the 30 credits must be at the 300 or 400 level. Courses listed under both perspectives and experiences may count toward either, but not both. Environmentally related independent study courses, study abroad programs, and other courses not on the approved list may count toward this requirement if approved in advance by the PoE adviser.
2. ~~Perspectives: Minimum three credits in each of the following: natural sciences; human and social dimensions; policy and decision making; and tools and technologies.~~
3. ~~Experiences: Minimum three credits in each of the following: bioregional studies and experiences; global studies and experiences; fieldwork.~~

Capstone Experience (10 credits)

1. ENVIR 490, ENVIR 491, ENVIR 492

GPA Requirements: Minimum 2.0 grade in each course presented for the major, ~~except that courses taken to fulfill the biology, chemistry, and statistics requirements under foundational courses may be satisfied by an overall 2.00 GPA for the four courses combined.~~

Minor

Minor Requirements: 30 credits, including ENVIR 100 and either ENVIR 200 or ENVIR 250. Five credits from among ECON/ENVIR/ESRM 235, HSTAA/ENVIR 221, and PHIL/ENVIR 243. Remaining ~~20-15~~ credits drawn from the environmental perspectives course list (see program Web site or adviser for list). At least one course (minimum three credits) in each environmental perspectives course category, i.e., natural sciences; human and social dimensions; and policy and decision making; and tools and technologies. Ten of these ~~20-15~~ credits must be at the 300 or 400 level. Minimum 2.0 for each course presented for the minor.

Proposed Catalog Copy:

Bachelor of Arts

Suggested First and Second-Year College Courses: ENVIR 100, ENVIR 200, ENVIR 250, and all foundational courses listed below.

Program Admission Requirements

Students in good academic standing can declare this major at any time.

General Education Requirements

All majors must satisfy the College of the Environment general education requirements.

Major Requirements

110 credits, as follows:

Core Courses (20 credits)

1. ENVIR 100, ENVIR 200, ENVIR 250, ENVIR 300

Foundational Courses (50 credits)

1. Biology (10 credits): BIOL 180 and one course (or sequence) from among BIOL 200, BIOL 118/BIOL 119, BIOL/FISH/OCEAN 250
2. Chemistry (5 credits): CHEM 120
3. Earth Systems Literacy (10 credits):

Climate: One course from ATM S 211 or ESS 201

Land, Water, or Atmosphere: One course from ATM S 212, ESS 210, ESS/OCEAN 230, OCEAN 200/201, GEOG 205

- ~~3. Earth Systems Literacy (3-5 credits): One course from among ATM S 211, ESS 201, ESS 230/OCEAN 230, GEOG 205, OCEAN 200~~
4. Quantitative Methods (10 credits): One course from among Q SCI 381, STAT 220, STAT 311; AND one course from approved list (see department Web site or advising office for list).
5. Values and Cultures (15 credits): Three courses from among ECON/ENVIR/ESRM 235, HSTAA/ENVIR 221, and ENVIR/PHIL 243. With adviser approval, students may substitute related courses, including courses previously listed as approved to meet this requirement.

Environmental Perspectives and Experiences (30 credits)

1. Minimum 30 credits from the list of approved courses (see department Web site or advising office for list). Minimum three credits in each of the six following categories: Perspectives - human and social dimensions; natural sciences; and policy and decision making; Experiences - bioregional; international; and fieldwork. At least 25 of the 30 credits must be at the 300 or 400 level. Courses listed under both perspectives and experiences may count toward either, but not both. Environmentally related independent study courses, study abroad programs, and other courses not on the approved list may count toward this requirement if approved in advance by the PoE adviser.

Capstone Experience (10 credits)

1. ENVIR 490, ENVIR 491, ENVIR 492

GPA Requirements: Minimum 2.0 grade in each course presented for the major.

Minor

Minor Requirements: 30 credits, including ENVIR 100 and either ENVIR 200 or ENVIR 250. Five credits from among ECON/ENVIR/ESRM 235, HSTAA/ENVIR 221, and PHIL/ENVIR 243. Remaining 15 credits drawn from the environmental perspectives course list (see program Web site or adviser for list). At least one course (minimum three credits) in each environmental perspectives course category, i.e., natural sciences; human and social dimensions; and policy and decision making. Ten of these 15 credits must be at the 300 or 400 level. Minimum 2.0 for each course presented for the minor.

Proposed list of approved course to meet Quantitative Methods requirement:

***NOTE:** All of these courses are on the current list of approved courses for the "Tools & Technologies" requirement which will be replaced by the Quantitative Methods requirement.*

ESRM 250 Introduction to Geographic Information Systems in Forest Resources (5) NW, QSR

Applications of GIS technology to forest science and management. Fundamentals of GIS systems: data sources, preprocessing, map analysis, output; remote sensing as a source of GIS data, image analysis, and classification. Emphasis on GIS as a source of management and technical information requests. Offered: AWSp.

ESRM 304 Environmental and Resource Assessment (5) I&S/NW, QSR

The processes of measuring, monitoring, and assessment; illustrated in diverse environmental and resource case studies. Explores the scientific method, hypothesis testing, sampling, and experimental designs, the role of questionnaires and polling techniques, remote sensing techniques, and population measurements. Prerequisite: either Q SCI 381 or STAT 311, either of which may be taken concurrently. Offered: ASp.

ESRM 430 Hyperspatial Remote Sensing in Natural Resource Management (5) NW Moskal

Focuses on hyperspatial remote sensing fundamentals, interpretation and manipulation of aerial photography, satellite imagery, and Light Detection and Ranging (LiDAR). Uses traditional and 'state of the art' image processing techniques. Students learn to evaluate available hyperspatial remote sensing data sources and design simple projects related to environmental applications. Offered: Sp.

ESS 421 Introduction to Geological Remote Sensing (4) NW

Principles of image interpretation for geologists. Study of land forms, structure, lithology, surface processes using aircraft and satellite data. Use of digital multispectral images and radar images for geological mapping.

FISH 453 Geospatial Pattern Analysis and Geostatistics (3) NW Logsdon

Focuses on the application of geospatial pattern analysis and geostatistics in earth science research. Develops understanding in detecting, describing, and estimating spatial pattern and trends. Prerequisite: either Q SCI 381 or Q SCI 482; OCEAN 452. Offered: jointly with OCEAN 453; W.

GEOG 360 Principles of GIS Mapping (5) I&S, QSR Elwood, Nyerges

Origins, development, and methods of cartographic mapping. Principles of data representation and map design for thematic mapping and spatial analysis. Introduction to principles of geographic information systems. Offered: ASp.

GEOG 471 Methods of Resource Analysis (5) I&S ZumBrunnen

Economic and noneconomic criteria for resource analysis. Theory and methods of linear models of natural resource analysis. Includes materials-balance modeling, residuals management, constrained

system optimization approaches to water quality analysis, land-use patterns and interregional energy use, and multiple objective planning techniques applied to natural resource problems. Recommended: GEOG 370.

Q SCI 482 Statistical Inference in Applied Research I: Hypothesis Testing and Estimation for Ecologists and Resource Managers (5) NW

Analysis of variance and covariance; chi square tests; nonparametric procedures multiple and curvilinear regression; experimental design and power of tests. Application to biological problems. Use of computer programs in standard statistical problems. Prerequisite: either STAT 311 or Q SCI 381. Offered: AW.

Other Departments Affected:

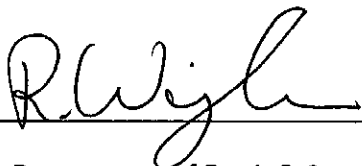
Program on the Environment Proposal to Change Requirements for B.A. and Minor in Environmental Studies



Chair, Department of Atmospheric Sciences or designee

5/12/10

Date



Chair, Department of Earth & Space Sciences or designee

5/12/10

Date

NA

Chair, Department of Geography or designee

Date



Director, School of Oceanography or designee

5/14/10

Date

NA
Chair, Department of Anthropology or designee

Date

See Attached
Chair, Department of History or designee

Date

See Attached
Chair, Department of Philosophy or designee

Date

See Attached
Chair, School of Forest Resources or designee

Date

MICHELLE R. HALL

From: Ken Clatterbaugh [clatter@u.washington.edu]
Sent: Friday, May 14, 2010 5:23 PM
To: MICHELLE R. HALL
Cc: MICHAEL I. BLAKE
Subject: Re: Change to Envir. History, Philosophy, and Economics requirement for POE

Michelle,

You just caught me as I am leaving town, but yes I strongly support this proposal and I am not concerned about the additional students since I believe the number will be small.

Ken

MICHELLE R. HALL wrote:

>
> Tom, Kent, Ken, and Michael,
>
> I'm writing on behalf of Julia Parrish, Director of the Program on the
> Environment, regarding a proposal that we are completing to change the
> "Values & Cultures" requirement for the BA in Environmental Studies,
> which involves courses that we co-list with all of your units. Here is
> the proposed change:
>
> Currently, we require our students to take 10 credits of Values and
> Cultures coursework from among ANTH 210, ESRM/ECON/ENVIR 235,
> HSTAA/ENVIR 221, and ENVIR/PHIL 243. We would like to require our
> students to take 15 credits from this list beginning Autumn 2010.
>
> We do not anticipate a large increase of our majors registering in any
> one offering of your courses. Since we have MOU's with each of your
> units that outline agreements to provide TA support or other
> instructional support and to work with you on managing enrollments, we
> already have mechanisms in place to check in regularly about
> enrollments and adjust plans accordingly.
>
> We are trying to meet a Tuesday, May 18 curriculum proposal deadline
> so would really appreciate it if you could respond to this message to
> let us know if you support this proposed change and any feedback you
> have by Monday if possible.
>
> Note that we are communicating separately with Anthropology since we
> do not yet have an MOU in place or a co-list with them.
>
> Thanks much,
>
> Michelle
>
> _____
>
> Michelle Hall
>
> Undergraduate Program Coordinator
>
> Program on the Environment <<http://depts.washington.edu/poeweb/>>
>
> University of Washington

MICHELLE R. HALL

From: R. Kent Guy [qing@u.washington.edu]
Sent: Monday, May 17, 2010 3:15 PM
To: MICHELLE R. HALL
Subject: Re: Change to Envir. History, Philosophy, and Economics requirement for POE

This will be fine with us.

Kent Guy

----- Original Message -----

From: MICHELLE R. HALL
To: Tom Hinckley ; R K. Guy ; Kenneth C. Clatterbaugh ; MICHAEL I. BLAKE
Cc: Julia K. Parrish
Sent: Friday, May 14, 2010 4:26 PM
Subject: Change to Envir. History, Philosophy, and Economics requirement for POE

Tom, Kent, Ken, and Michael,

I'm writing on behalf of Julia Parrish, Director of the Program on the Environment, regarding a proposal that we are completing to change the "Values & Cultures" requirement for the BA in Environmental Studies, which involves courses that we co-list with all of your units. Here is the proposed change:

Currently, we require our students to take 10 credits of Values and Cultures coursework from among ANTH 210, ESRM/ECON/ENVIR 235, HSTAA/ENVIR 221, and ENVIR/PHIL 243. We would like to require our students to take 15 credits from this list beginning Autumn 2010.

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Note that we are communicating separately with Anthropology since we do not yet have an MOU in place or a co-list with them.

Thanks much,

Michelle

Michelle Hall
Undergraduate Program Coordinator
Program on the Environment
University of Washington
ACC Box 355679
3737 Brooklyn Avenue NE
Seattle, WA 98195-2802
Phone: 206-616-1208 Fax: 206-616-2465

MICHELLE R. HALL

From: Tom Hinckley
Sent: Friday, May 14, 2010 7:09 PM
To: MICHELLE R. HALL
Subject: RE: Change to Envir. History, Philosophy, and Economics requirement for POE

Ok. Tom
Thomas Hinckley
Interim Director School of Forest Resources David RM Scott Professor of Forestry

From: MICHELLE R. HALL
Sent: Friday, May 14, 2010 4:26 PM
To: Tom Hinckley; R K. Guy; Kenneth C. Clatterbaugh; MICHAEL I. BLAKE
Cc: Julia K. Parrish
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Note that we are communicating separately with Anthropology since we do not yet have an MOU in place or a co-list with them.

Thanks much,
Michelle

Michelle Hall
Undergraduate Program Coordinator
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