Memorandum of Understanding (MOU)

Between Office of Academic Affairs
And
Environmental Sciences and Management, College of Liberal Arts & Sciences

Reference: A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements

I. Purpose

This MOU outlines partnership roles and responsibilities for implementation of the Provost Challenge project: A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements.

II. Project Description and Key Project Outcomes

Overview:
A collaboration that is centered in the ESM department will offer at least eight courses in a fully online format. These courses have been chosen by the department to meet three criteria: 1) the course serves an undergraduate requirement, 2) the online format offers a pedagogical advantage, and 3) the instructor is willing to develop an online format. Our department is enthusiastic about participation in this project because the flexibility and accessibility of these new courses will help us meet a wide range of departmental goals. For example, these courses will help optimize faculty work assignments to match research needs, will reduce bottlenecks in the curriculum, and will allow students to accelerate their undergraduate degree toward a BS+Masters option. Other departments will also benefit: we have been working with CCJO toward offering ESM 101 and 102, including a fully online lab. Faculty will work through on-line course modules on how to create web courses that are made available by our national association. The online format for these courses will be created during a summer 2013 workshop and they will be rolled out over the three terms of 2013/14

Key project outcomes (as agreed by Project Lead and Vice Provost):
• Offer the following courses online: ESM 150*, ESM 101, ESM 102, ESM 335**, ESM 340, UNST 224, ESM 355U, SYSC 399U, and USP 313U
  • Courses will be fully online
  • Students will be able to finish lab requirements for BS degree as a result of implementing project #67

*No Course proposal yet.
**To be determined. This course may be developed as a hybrid course.
III. Funding
The project team will be funded up to $135,000 to achieve the outcomes established for this project. Vice Provost for Academic Innovation in consultation with Provost and the appropriate dean may increase, reduce or terminate funding for this project.

IV. Project Coordination
The College of Liberal Arts & Sciences agrees to assign a program liaison who will serve as the main point of contact between OAA and ESM, to coordinate the implementation of this proposal and to assist with any issues that might arise.

Coordination will include:

- Coordination and communications between the project team, departments, and the College of Liberal Arts & Sciences (hereafter referred to as “the College”) and other administrative units to ensure policy and procedures are in place to facilitate the offering of this program to distance students.
- Development and implementation of Service Level Plan with OAI in close collaboration with project leadership team.
- Collaborate with focus area leads to improve collaboration among reTHINK PSU: Provost Challenge projects.

Department Program Liaison: (Name, email, phone)
Focus area lead: Veronica Dujon, Associate Dean, CLAS; Rowanna Carpenter, Director of Assessment and Upper Division Clusters, UNST
Office of Academic Innovation Point of Contact: Johannes De Gruyter, Interim Director, Platform & Pedagogy

V. Course Development and Collaboration
The Course Developers/Instructors will engage in continued collaboration with OAI from project inception and will ensure course completion and approval of the course at least 4 weeks prior to the initial term start. The project coordinator and OAI will determine the appropriate course development process for this project. The project coordinator will consult with the project leadership team for input on the appropriate process. Completion status of the course is determined by the Director of Pedagogy & Platform in consultation with the College designee. Courses will be reviewed for quality assurance by designee(s) from the College/Department and Office of Academic Innovation upon completion and approval prior to initial course offering.

If the course is not complete in D2L and ready to be taught at least 4 weeks prior to the start of initial term, the OAI Director of Pedagogy & Platform will consult with the Department Chair concerning advisability of course cancellation.

As delineated in the existing MOU with the College, Office of Academic Innovation will provide basic course development and production including: instructional design with best practices covering accessibility and copyright, project management, media development, D2L course development, training, and on-going student (OIT) and instructor support. In addition, for this project, OAI will support the development of course elements and templates for use across ESM online courses and the production of training materials to support the future development of ESM online courses and the use of the course elements and templates. This work will proceed as collaboration between OAI and the project leadership team. Budget permitting, OAI will also provide support to faculty in subsequent years to assure courses reflect current best practices and up to date course content.

VI. Use of Course and Materials
Course Developer(s) will be the named author or a principal developer of the course materials. The Course Developer has the right to remove his or her name from the course at any time, in coordination with the academic Department and Office of Academic Innovation. The Department can appoint others to teach this course.

Consistent with the rules encompassed in Oregon Administrative Rule 580-43 and Internal Management Directive 6.2, and by PSU’s guidelines found at http://www.pdx.edu/research/ip-policies-copyright, PSU owns the course and materials. Full and specific course materials guidelines can be found at http://www.pdx.edu/research/ip-policies-coursematerial. Even if, by policy, the copyright to course materials must be assigned to PSU, the creator of those
course materials still retains some control over them. If the PSU owned work will not be given away or exchanged for monetary compensation, PSU gives the author free permission to copy, distribute, make derivatives, perform, or display the work as long as they are appropriately marked © Portland State University. PSU, however, also reserves the right to use the work in any way it wishes.

VII. Dissemination
ESM is responsible for updating the University community about the status of the project. This includes maintaining their reTHINK PSU: Provost Challenge website web presence, participating in public presentations, and participation in an ongoing community of practice. Specific opportunities for participation in public events will be presented to ESM by the Office of Academic Innovation.

VIII. Evaluation & Project Improvement
ESM agrees to work with OAI and their development services partner (this may include: external vendor for course development, video production, etc.) to implement a plan for putting formative and summative feedback mechanisms in place to measure project success, including basic student success metrics.

End-of-Project Report:
Please submit a final report after completion of the project to include:

- Description of the development process
- Two-year schedule for continued course and program delivery
- Survey of student feedback on the experience taking the courses (where available)
- Course evaluation instruments
- Faculty evaluation of the program/project development activity supported by OIA
- Final expense report
- Plans for program sustainability

After submission and acceptance of the final report, the Office of Academic Innovation review team will verify that all program components are in place.

IX. Funding Agreement Terms
The funding agreements in this document are contingent upon completion of course development and offering as describe above, and summarized in the Course Development Plan. Changes to the agreements, timetables or funding will be based on written agreement between the College and Office of Academic Innovation designees. OAI will provide an index code that will be used for funding of this project. There will be no transfer of funds.

X. Resolution of Disagreements
In the event of a disagreement that cannot be resolved by the parties, resolution will be through agreement of Vice Provost for Academic Innovation and the Dean of the Department's College.
WITNESS WHEREOF, the representatives have signed this Memorandum of Understanding on the
1st day of August, 2013.

John Rueter, Project Lead, Professor, ESM

Yangdong Pan, Department Chair, ESM

Sukhwant Jhaj
Vice Provost for Academic Innovation and Student Success

Sue Beatty, Dean, CLAS

Enclosures:
• Copy of reThink PSU: Provost Challenge project proposal
• Approved budget
• Project team and contact information
• List of courses, new or existing, to be developed as an online offering (as appropriate)
• Degree Map (as appropriate)
#67 A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements

Last modified: February 20, 2013 - 10:52am

Project Lead
John Rueter
Professor
Environmental Sciences and Management – Liberal Arts & Sciences

Primary Collaborators
Yangdong Pan
Professor, ESM Dept. Chair
Environmental Sciences and Management – Liberal Arts & Sciences
Catherine de Riveria
Associate Professor
Environmental Sciences and Management

Additional Collaborators
Jeff Gerwing, ESM and UNST, jgerwing@pdx.edu Dick Dewey, ESM, deweyr@pdx.edu Kevin Lein, PCC Rockcreek, klein@pcc.edu Laura Hickman, CCJO, lhickman@pdx.edu Barbara Maidel, CCJO, maidellb@pdx.edu

Challenge
Acceleration Challenge

Abstract/Summary
A collaboration that is centered in the ESM department will offer at least eight courses in a fully online format. These courses have been chosen by the department to meet three criteria: 1) the course serves an undergraduate requirement, 2) the online format offers a pedagogical advantage, and 3) the instructor is willing to develop an online format. Our department is enthusiastic about participation in this project because the flexibility and accessibility of these new courses will help us meet a wide range of departmental goals. For example, these courses will help optimize faculty work assignments to match research needs, will reduce bottlenecks in the curriculum, and will allow students to accelerate their undergraduate degree toward a BS+Masters option. Other departments will also benefit: we have been working with CCJO toward offering ESM 101 and 102, including a fully online lab. Faculty will work through on-line course modules on how to create web courses that are made available by our national association. The online format for these courses will be created during a summer 2013 workshop and they will be rolled out over the three terms of 2013/14.

Introduction
Like many departments, the Environmental Sciences and Management Department (ESM) offers a selection of degrees, certificates, and minors. Unlike many other departments, however, our requirements are hierarchical and many of our courses have labs or additional sections. This structure allows us to build rigor into the overall curriculum but it restricts student flexibility in the timing of their course selection. As our department enrollment continues to grow (92% growth in the last 5 years), we are bumping up against scheduling and flexibility barriers.

This call for proposals comes at a good time because we have been discussing using online formats for several target courses. Several of our large courses are currently taught in hybrid format to facilitate student access (e.g., ESM 101 and 102). An infusion of bridge funding would support the pulse of effort that is required to create enough online courses to reduce bottlenecks and increase access as well as to mobilize a synergistic effort among interested faculty. These courses would span 100-level introductory courses, 200-level SiNQs, 300-level courses that serve general education cluster requirements, and 300-level courses key to our departmental degrees.

We plan to offer ten fully online courses (in addition to traditional f2f sections in some cases):

- ESM 150 – Orientation (to be offered in conjunction with ESR150 at PCC Rockcreek)
- ESM 101 and 102 – Introduction to Environmental Science, each with a specific section that meets the needs of CCJO
Portland State reTHINK PSU | A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements

- ESM 335 – Environmental Management
- ESM 340 – Experimental Design
- ESM 342 – Environmental Methods

We are also collaborating with UNST to propose offering:

- UNST 224 Sustainability SINQ
- ESM 355U Understanding Environmental Sustainability
- Two more courses from the cluster will be recruited

The impact and strategy will be described in detail below, but we feel that these courses will allow us to meet these major goals:

- employ faculty expertise over the full year;
- reduce fragmentation of faculty work time, allowing more blocks of time for research and service while still delivering a valuable educational experience;
- provide options for our undergraduates to take key courses at the appropriate time in their curriculum (rather than waiting a year);
- provide opportunities for students to accelerate their undergraduate degree by focusing on learning outcomes they need to demonstrate;
- allow our majors to take SINQ and cluster from the sustainability cluster;
- recruit well prepared freshman and facilitate preparation for transfer students;
- offer an option for a BS plus MEM in five years.

About half of our department (both tenure line and fixed term faculty) have expressed interest in participating in the effort to modify a course to have on–line option. We feel this critical mass of staff in one department would have a high chance of being successful because we (as a department) have control of the curricular approval, assessment, and course assignment processes. In addition, we have significant collaborators from outside the department who have a real stake in the outcome.

Impact/Significance

Offering this set of courses fully online will be part of an overall strategy for ESM to meet three departmental goals. These goals are explicitly student centered and can be met with a range of pedagogies; however, the online courses would provide several advantages.

1. We have plans to double the size of the Environmental Studies major, addressing student demand, from about 40 students per year at the 300 level to 80 per year. We plan to do this by opening up the program to a selective cohort from Tongji University (China), PSU’s strategic international partner, as well as including more Oregon and regional students. We would like students to take ESM 335 Environmental Management before they take any 400–level management course. An online version of ESM 335 would allow that requirement to be enforced despite this growth.

2. We have been working to recruit well qualified students as freshman. For example, our departmental leadership in the GK–12 project provides strong connections to schools with good science programs. ESM 101 and 102 would allow us to bring freshman right into the curriculum (these two courses together allow the student to waive ESM 220). We have prepared an advising sheet that describes how students can get a running start at the degree and shows them how to get a BS plus MEM in five years.

3. One challenge that we have been facing is that some of the students need more help with quantitative skills. ESM 340 Experimental Design was constructed to meet the specific analytical needs of our students. A modular online version would help students meet proficiency in each area that they will need and be available as a refresher tutorial when these topics come up in subsequent terms.

These courses also support the university. In particular ESM 101 and 102 would meet the university requirement for science with a lab. These courses can meet this lab requirement despite an online offering because their assignments are conducted in the field rather than in the lab per se. The lab sessions for this course have already been modified to meet out-of-grid for extended times to perform biodiversity transects, evaluations of alternative technologies, and other workshops. Our departmental involvement in the SINQ and clusters could also expand. An online version of these popular courses could help transfer students in particular when
3/25/13 Portland State reTHINK PSU | A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements they need an extra cluster course.

**Approach and Strategy**

Our overall strategy takes advantage of several key assets and emphasizes clarity about our expectations from faculty, staff, and university support.

**required courses** – We are proposing to modify a coherent set of courses that meet four curricular requirements: SINQ+cluster, science with a lab, core courses for both Environmental Studies and Environmental Science degrees.

**serves critical need** – Following an agreement between ESM and CCJO that address the dearth of online science lab courses, we will be offering online versions of ESM 101 and 102.

**tech savvy faculty** – Due to the nature of some disciplines, web authoring is part of our normal training. The project lead has been involved in modification of large classes across the university (funded by FIPSE) and several participants have experience with NSF-funded course revision and curricular projects.

**support from professional society** – Several discipline-based projects support our effort. For example, the National Council for Science in the Environment recently offered a series of webinars about putting environmental courses online. NCSE also maintains resources for online content.

Our project management plan combines individual preparation with group workshops, sequenced to facilitate rapid but coordinated conversion to an online format.

1 **Spring term 2013**
   a. Participants will work through the NCSE webinars on their own.
   b. A half-day workshop for all participants will cover BMPs and performance metrics for online students. Participants will develop the final list of courses to be constructed, indicating 'self-paced' or 'synchronous' for each, and specify project goals and objectives for rolling out the courses.

2 **Summer 2013**
   a. A week-long work session for faculty and support staff (e.g., TAs or peer mentors) will identify how each course fits in with ESM's progression of learning objectives and develop assignments addressing these objectives. Faculty and staff will be paid for their participation.
   b. The media requirements of each course (such as podcasts, short videos, etc.) will be established.
   c. A staff person with experience with media will work with OIT support and the faculty for each course to develop the required media.
   d. The group will review all developed courses.

3 **Fall 2013** – The first set of courses will be rolled out. These courses will have an extra level of support for their first run.

4 **Winter and Spring 2014** – The second and third set of courses will be rolled out, with extraordinary support as before.

5 **Summer 2014** – A workshop for all faculty and staff will focus on continuous improvement and will facilitate discussion about effective troubleshooting, meeting goals, and techniques for assessing student learning online.

6 **2014/15 continuing support** will be provided for ongoing modification of the courses.

7 **2015 and beyond** – the additional SCH, graduation rate improvements, and other indicators will determine budget allocations to these courses at the department and college level.

**Milestones**

Our project management plan combines individual preparation with group workshops, sequenced to facilitate rapid but coordinated conversion to an online format.

1 **Spring term 2013**
   a. Participants will work through the NCSE webinars on their own.
   b. A half-day workshop for all participants will cover BMPs and performance metrics for online students. Participants will develop the final list of courses to be constructed, indicating 'self-paced' or 'synchronous' for each, and specify project goals and objectives for rolling out the courses.

2 **Summer 2013**
A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements

a. A week-long work session for faculty and support staff (e.g., TAs or peer mentors) will identify how each course fits in with ESM’s progression of learning objectives and develop assignments addressing these objectives. Faculty and staff will be paid for their participation.

b. The media requirements of each course (such as podcasts, short videos, etc.) will be established.

c. A staff person with experience with media will work with OIT support and the faculty for each course to develop the required media.

d. The group will review all developed courses.

3 Fall 2013 – The first set of courses will be rolled out. These courses will have an extra level of support for their first run.

4 Winter and Spring 2014 – The second and third set of courses will be rolled out, with extraordinary support as before.

5 Summer 2014 – A workshop for all faculty and staff will focus on continuous improvement and will facilitate discussion about effective troubleshooting, meeting goals, and techniques for assessing student learning online.

6 2014/15 continuing support will be provided for ongoing modification of the courses.

7 2015 and beyond – the additional SCH, graduation rate improvements, and other indicators will determine budget allocations to these courses at the department and college level.

Benefits
The two most important benefits that are driving our participation in this program accrue to the faculty and to students.

About half of our faculty (8 faculty) will be participating in moving courses to hybrid or fully online. We intend to do this in a manner that will create more control over our work assignment and at the same time provide increased value. We realize that an investment in this change will require more time and effort over the short term (first year especially) but we will recover that investment in the ability to schedule our presentations and interactions with students. This is crucial for our faculty who have pressing funded research and graduate advising work.

We see this as an opportunity to make a fundamental change in our courses from presentation to interaction. In selected cases where the presentation format of the lecture can be delivered on-line, the focus of the faculty interaction with students can shift to timely feedback, critical guidance, and mentoring. The ten courses that will be revised have a combined enrollment of at least 500 different faces per year.

Consequences
The ESM faculty is already moving in the direction of putting some courses into hybrid and fully on-line format. The ReThink program is an opportunity for funding to do this in a concerted and step-wise manner. Not funding this would reduce the number of courses being tranformed to two or three per year. For example, ESM101 and 102 are already scheduled to have a fully on-line lecture and lab section starting in Fall 2013. Not funding the department for this project would eliminate the opportunity use this project as a mechanism to vertically harmonize all course offerings for content and skills.

Not funding our proposal AT THIS TIME, might have beneficial consequences if progress can be made on other ReThink proposal. Specifically the creation of on-line SINOQ and cluster courses in sustainability would come from our department anyway. Also, creating a testing center and some of the authoring support could be beneficial (but not essential) to our project.

Needs Assessment
Download (http://rethink.pdx.edu/sites/default/files/needsassessment-67.doc)

Program Information
Download (http://rethink.pdx.edu/sites/default/files/accelerationchallenge-67.doc)

Degree Map
Download (http://rethink.pdx.edu/sites/default/files/env%20sci%20plan%20revised%202011%2012.xlsx)

Download (http://rethink.pdx.edu/sites/default/files/env%20studies%20plan.xlsx)

Comments

Jennifer Allen — December 31, 2012 – 10:10am
A coherent set of ten fully online courses at multiple levels that meet university, general education, and departmental requirements. This proposal would address a number of opportunities/challenges and builds on a strong foundation of existing courses and partnerships such as that with Tongji. The process for building the program out is thoughtfully mapped out.

News
Vanguard: Professor fights climate change »
Persian Studies Debut 2013
PARSA Lecture Series: Iranian Women: From Ancient to Modern Times »
The Enlightened Parent: Fun with the Family & Freebies »
go to news

Events
Monday, Mar 25
Dad’s Group »
Tuesday, Mar 26
Take Back the Night/Bike Back the Night Committee Meeting »
Wednesday, Mar 27
Campus Wide Cross Training for Frontline Staff »
go to events

Profile
Meet Josh Triplett »
My advice to prospective computer science students is to get a good advisor and take full advantage of the many opportunities at Portland State to be

go to profiles
reTHINK Project #67
Project Lead: John Rueter
Final Budget

Proposal # 67
Award Amount: $135,000

ReThink PSU Budget Template

<table>
<thead>
<tr>
<th>Category</th>
<th>Two Year Costs --</th>
<th>FINAL BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Budget Team Estimate</td>
<td>Original Request</td>
</tr>
<tr>
<td>Personnel (Including OPE)</td>
<td>$89,347</td>
<td>$77,609</td>
</tr>
<tr>
<td>Training and Faculty Development</td>
<td>$37,391</td>
<td>$37,391 No Changes</td>
</tr>
<tr>
<td>Materials and Supplies</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Consultants/Contractors</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Library</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$146,738</strong></td>
<td><strong>$135,000</strong></td>
</tr>
</tbody>
</table>

Instructions: Please fill in your requested budget amount for each category in the highlighted column. See the related tabs for information pulled from your budget with modifications made by the budget team, plus amounts estimated by the Library and OIT.

NOTE: TRAINING AND FACULTY DEVELOPMENT COSTS CANNOT BE CHANGED.
Project #67 Team Information

Project Lead:
John Rueter, rueterj@pdx.edu, 5-3194

Primary Collaborators:
Yangdong Pan, pany@pdx.edu, 5-4981
Catherine de Rivera, derivera@pdx.edu, 5-9798
**Acceleration Challenge: Program Information**

Name of Program:

Department: Environmental Science and Management

Quarter/year to begin:

Program of Study (select all that apply):

- [ ] BS
- [ ] BA
- [ ] MA
- [ ] MS
- [ ] MBA
- [ ] MFA
- [ ] Ed.D.
- [ ] Ph.D.
- [ ] Other

Other:

# hours in Program: # courses: # current grad (yr): # potential grads (yr):

Please list departmental courses that will be required for completion of this program. In case of undergraduate programs, do not include general education courses.

OR

List general education courses if you are proposing a cluster of online courses to meet University Studies or degree requirements.

Indicate which courses need to be developed for online delivery. Also identify if the content is to be developed at PSU or acquired externally (Examples: AppleU, WICHE ICE, The Open Learning Initiative (OLI), OnlineLabs, partner university.)

<table>
<thead>
<tr>
<th>Course Dept.</th>
<th>Course #</th>
<th>Course Title</th>
<th>Existing or New</th>
<th>Online (Yes/No)</th>
<th>Source PSU or External</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESM</td>
<td>150</td>
<td>Orientation</td>
<td>New</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>ESM</td>
<td>101</td>
<td>Intro to Environmental Science I</td>
<td>Existing</td>
<td>Yes</td>
<td>PSU</td>
</tr>
<tr>
<td>ESM</td>
<td>102</td>
<td>Intro to Environmental Science II</td>
<td>Existing</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>ESM</td>
<td>335</td>
<td>Intro to Environmental Management</td>
<td>Existing</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>ESM</td>
<td>340</td>
<td>Research Methods</td>
<td>Existing</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>ESM</td>
<td>342</td>
<td>Field Methods</td>
<td>Existing</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>ESM</td>
<td>355</td>
<td>Understanding Environmental Sustainability</td>
<td>Existing</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>Unst</td>
<td>224</td>
<td>Sustainability SINQ</td>
<td>Existing</td>
<td>No</td>
<td>PSU</td>
</tr>
<tr>
<td>xxx</td>
<td>xxx</td>
<td>Possible cluster course</td>
<td>Existing</td>
<td>Unknown</td>
<td>PSU</td>
</tr>
<tr>
<td>xxx</td>
<td>xxx</td>
<td>Possible cluster course</td>
<td>Existing</td>
<td>Unknown</td>
<td>PSU</td>
</tr>
</tbody>
</table>

(Add rows as needed)
#67 Environmental Science & Management Online University-, Gen Ed-, and departmental-requirement Courses

Of the ten courses proposed to be redeveloped into online courses, all but one already exist. As existing courses, most of the effort in this proposal requires redevelopment of those courses into online courses. As such, approval by UCC and Faculty Senate will be minimal.

Four of the proposed redeveloped courses for the project include Unst 224 Sustainability SINQ, ESM 335U Understanding Environmental Sustainability, and two additional related cluster courses, all of which are (or have the possibility of being) included in the #63 University Studies Online General Ed Pathways proposal.

The proposal includes a course ESM 150 Orientation which does not exist. If the department wishes to create such a course, it will need to go through the standard approval process.

Possible action required:

1. ESM and CLAS: the department curriculum committee and the CLAS curriculum committee will have to approve the ESM 150 Orientation course.

2. UCC: The UCC will have to approve the ESM 150 course. If the proposal is submitted in early Fall 2013, it could be approved and submitted to Faculty Senate by the end of the term or before.

3. Faculty Senate: The Senate will have to approve the ESM 150 course. This could be done by the end of Fall 2013 and the course could be offered as soon as Winter 2014.

The Milestones section of the proposal suggests that the first set of courses will be rolled out in Fall 2013. If that first set includes ESM 150, the course would have to be offered as an omnibus experimental course.
reTHINK project: USP 313U

Yangdong Pan <bwyp@pdx.edu>
to Connie

8:52 AM (11 minutes ago)

I hope that your summer has been going well. I am writing regarding offering USP 313U as a fully online course. John Ruster is leading a reTHINK project (#67) funded by OAA to convert a set of courses fully online. Barry Messer will get summer stipend to convert USP 313U into fully online during this summer. According to John, Barry has discussed with you and you have agreed that he will teach USP 313U as a fully online course in AY13-14. If you can confirm, I will include this email exchange as an appendix for the MOU among ESM, CLAS, and OAA. If you have any question or need more information, please let me know. Thanks, Pan

Connie Ozawa
to me

8:59 AM (3 minutes ago)

Hi, Pan,

As I understand it, Barry will teach this online during summer 2014, so as not to compete with our other offerings of USP 313. He is scheduled to teach USP 313 on campus during the fall; winter and spring are covered by other faculty.

Thanks!

Connie

Yangdong Pan <bwyp@pdx.edu>
to Connie

9:03 AM (0 minutes ago)

Great! Thanks, Connie.

Click here to Reply or Forward
# Portland State University

## Department of Environmental Science and Management

### B.S. in Environmental Science Degree

#### Possible 4 Year Degree Plan

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
<td>Fall</td>
</tr>
<tr>
<td>Environmental Science Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 Credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESM 220</td>
<td>ESM 221</td>
<td>ESM 222</td>
<td>ESM 320</td>
</tr>
<tr>
<td>(4)</td>
<td>(4)</td>
<td>(4)</td>
<td>(4)</td>
</tr>
<tr>
<td>ESM 323</td>
<td>ESM 324</td>
<td>ESM 325</td>
<td>ESM 420</td>
</tr>
<tr>
<td>(4)</td>
<td>(4)</td>
<td>(4)</td>
<td>(4)</td>
</tr>
</tbody>
</table>

| Foundation Courses | | | | | | | | |
| 49 - 50 Credits | | | | | | | | |
| BIO 251 | BIO 252 | BIO 253 | CHEM 221 | CHEM 222 | (Chem, Stat 243, ESM 340) | MTH 251 | MTH 292 |
| (5) | (5) | (5) | (4) | (4) | (4) | (4) | (4) |

| Connected Learning upper division courses from approved list | | | | | | | | |
| 16 Credits | | | | | | | | |

| Upper Division Electives | | | | | | | | |
| 20 Credits | | | | | | | | |
| (12 min in social science/art and letters) | | | | | | | | |

| General Education University Studies | | | | | | | | |
| 45 Credits | | | | | | | | |
| Freshmen Inquiry | Sophomore Inquiry | Junior Cluster | Capstone |
| UNITS | UNITS | UNITS | UNITS |
| 5 | 1 | 1 | 1 |
| 1 | 2 | 2 | 2 |
| 2 | 4 | 4 | 4 |
| 4 | | | |

| 181 to 182 Credits | | | | | | | | |
| 14 | 14 | 17 | 17 | 14 | 14 | 18 | 15 | 14 | 13 |