I. Writing Plan Cover Page

*Please fill in the gray areas on this form.*

04/17/17

X☐ Subsequent Edition of Writing Plan: previous plan submitted Spr’16, First edition submitted Spr’16

Environmental Sciences, Policy, and Management (ESPM)

WEC Unit Name
Forest Resources; Fisheries, Wildlife, & Conservation
Biology; Soil, Water, & Climate; Bio-Based Products & Management
College of Food, Agricultural, and Natural Resource Sciences (CFANS)

Department
Kristen C. Nelson

WEC Faculty Liaison (print name)
Nelso468@umn.edu

Email

Phone
612-624-1277

Writing Plan ratified by Faculty

*Note: This section needs to be completed regardless of Writing Plan edition.*

Date: April 17, 2017

If Vote: 7 /8
# yes # total

Process by which Writing Plan was ratified within unit (vote, consensus, other- please explain):

We asked the ESPM Coordinating Committee to vote on continuing our work with the Writing Plans.
II. **Unit Profile: ESPM**

*Please fill in the gray areas on this form.*

### Number of Tenured and Tenure-Track Faculty:

<table>
<thead>
<tr>
<th>Faculty Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>37</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>11</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
</tr>
</tbody>
</table>

### Comments about Faculty/Instructors:

This is a major supported by multiple departments. In addition to 55 tenured/tenure track faculty, 8 Research Fellow instructors have had teaching assignments (1-2 courses) for over five years. On average, the faculty teaching load is 50% FTE with a range of 1000-8000 level courses.

### Major(s)

*Please list each major your Unit offers:*

<table>
<thead>
<tr>
<th>Major (ESPM)</th>
<th>Total # students enrolled as of Spring/2017</th>
<th>Total # students graduating with major AY 2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESPM</td>
<td>285</td>
<td>58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major(s)</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### WEC Implementation Process

<table>
<thead>
<tr>
<th>WEC Implementation Process</th>
<th>Semester/Year</th>
<th># participated</th>
<th># invited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop – Writing Assignments</td>
<td>Fall 2016</td>
<td>9</td>
<td>63</td>
</tr>
<tr>
<td>Workshop – Writing in 5 Minutes</td>
<td>Fall 2016</td>
<td>8</td>
<td>63</td>
</tr>
<tr>
<td>Workshop – Diverse Audiences</td>
<td>Spring 2017</td>
<td>6</td>
<td>63</td>
</tr>
<tr>
<td>Panel – Scientific Writing &amp; Feedback</td>
<td>Spring 2017</td>
<td>TBD</td>
<td>63</td>
</tr>
<tr>
<td>Focus Group – Implementation</td>
<td>Not completed</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
III. Signature Page

Signatures needed regardless of Writing Plan edition. Please fill in the gray areas on this form.

If this page is submitted as a hard copy, and electronic signatures were obtained, please include a print out of the electronic signature chain here.

WEC Faculty Liaison

Kristen C. Nelson
WEC Faculty Liaison (print name)

[Signature]

Date

04/17/17

Department Head/Chair: Forest Resources

Michael Kilgore
Print Name

[Signature]

Date

04/17/17

Department Head/Chair: Soil, Water, and Climate

Carl Rosen
Print Name

[Signature]

Date

04/17/17

Department Head/Chair: Fisheries, Wildlife, & Conservation Biology

Susan Galatowitsch
Print Name

[Signature]

Date

04/17/17

Department Head/Chair: Bio-based Products

Shri Ramashwamy
Print Name

[Signature]

Date

04/17/17
ESPM Major Coordinator

Joseph Knight
Print Name
Signature

Associate Professor, Forest Resources & Soil, Water and Climate
Title
Date

Associate Dean

Michael White
Print Name
Signature

Assoc. Dean
Title
Date
IV. Writing Plan

Narrative, 2nd Edition

Please retain section headers and prompts in your plan.

Introductory Summary:
Briefly describe the reason(s) this unit (department, school, college) become involved in the WEC project, the key findings that resulted from the process of developing this plan, and the implementation activities that are proposed in this Writing Plan, with particular attention to the following questions: what is new in this 2nd edition of the Writing Plan? What, if any, key changes have been made to the 1st edition? What key implementation activities are proposed in this edition of the Writing Plan? (1 page maximum)

The Environmental Sciences, Policy and Management (ESPM) major is an inter-departmental undergraduate major with five tracks. Initial interest in the WEC project was generated from ESPM faculty as they discussed successes and challenges of teaching undergraduate writing within their disciplines. At the curriculum level, two primary motivations to move forward with WEC included enhanced writing coordination across the tracks and increased instructional consistency regarding specific written products. Students work with writing in the sciences (social and natural), policy (decision making and argument), and management arenas (plans and evaluation).

Through surveys and discussion, ESPM instructors revealed: 1) writing remains important in future careers (professionals, academic and students), 2) room for improvement exists in student writing, 3) not all writing struggles will be addressed in our major, 4) six central writing abilities are consistently important across the disciplines.

For the second and third year of the WEC plan, we move from practical instructor-targeted workshops to a structural analysis of writing across the ESPM curriculum and community building. We did not make significant changes to the 1st edition but simply removed a final focus group because there were not enough people able to meet. The first group of activities for the 2nd edition include development of a writing assignments matrix for the ESPM Integrated Core Courses (5 total) as well as a writing assignment matrix for each of the Sub-plans, based on select key courses identified by the Sub-plan faculty. This information will inform faculty discussion and reflection about writing progression, objectives, repetition, gaps, etc. Based on summary reports from the matrices and faculty discussion, we will host small group feedback sessions with students and employers, respectively. The second activity is to raise the prominence of writing across the ESPM community and its partners. An employer panel discussion will be a featured event focused on the importance of writing in the workplace and the diversity of approaches within our field. Based on the example of successful employer panels used by other WEC program participants, we will invite undergraduates, graduates, and faculty to this community-wide program event.

Section 1: DISCIPLINE-SPECIFIC WRITING CHARACTERISTICS
What characterizes academic and professional communication in this discipline?

× There have not been substantial revisions to this section of the Writing Plan.
There have been substantial revisions to this section of the Writing Plan. (Discuss these explicitly.)

In 2015 Planning Meeting #2, faculty identified the range of **writing characteristics in Environmental Sciences, Policy, and Management**, summarized below.

1. **Logically structured**, moving either from claims to evidence, or tracking the evolution (or story) of data/findings
2. **Supported by evidence** including science-based evidence, legitimizers from policy (“the law says...”) or personal experience.
3. **Concise** (for example in consulting, an executive summary than cannot exceed 2 pages): tightly written without redundancy or extra words
4. **Descriptive**: providing concise technical summary of data
5. **Clear**: makes apt word choice, precise; conveys intended meaning
6. **Appropriate for specific audiences, including** public, scientific, planners, elected officials, policy makers, businesses, children in school groups, farmers, land owners and managers
7. **Culturally sensitive**: sensitive about the impact of words on issues related to gender, ethnicity, religion
8. **Persuasive and compelling** advocating a choice, action, outcome, and/or behavior change by addressing multiple perspectives
9. **Synthetic of technical information** and data and moves toward recommendations or decision tool (a targeted model or framework composed of multiple variables and perspectives)
10. **Multimodal**: includes prose, graphics, numbers, and charts and maps: visual messaging integrating text forms with non-text forms

**Section 2: DESIRED WRITING ABILITIES**

*With which writing abilities should students in this unit’s major(s) graduate?*

- There have not been substantial revisions to this section of the Writing Plan.
- There have been substantial revisions to this section of the Writing Plan. (Discuss these explicitly.)

In the 2015 Planning Meeting #1, faculty discussion focused on six writing abilities the ESPM students should have when they graduate. In Meeting #2, these were further refined into six writing abilities with sub-categories that we agreed to focus on in ESPM.

Abilities summary: **Upon graduation, students will be able to...**

1. **Intentionally and sensitively address specific readers**
   1.1 Set up problems in ways that pique reader interest
   1.2 Interpret technical data and translate findings in ways that can be understood by specific audiences
   1.3 Write with cultural sensitivity, and avoid alienating audiences by anticipating the impact of word choices on different populations
   1.4 Communicate across disciplines in a technically sophisticated way, aware of where one subfield ends and another begins
   1.5 Use professional language and specific, technical language where appropriate for audience
2. **Describe processes, sites, and data**  
   2.1 Describe sites accurately and objectively and using audience-appropriate terminology  
   2.2 Avoid superfluous details  
   2.3 Create accurate, unbiased descriptions that demonstrate an understanding of the science and its implications  

3. **Make, and provide evidence for, claims**  
   3.1 Offer a well-developed thesis  
   3.2 Search for, select, and use data and examples that readers will find appropriate, adequate, and credible  
   3.3 Analyze data: distill data and interpret distillation  
   3.4 Demonstrate familiarity with scientific process (collecting, analyzing data and testing hypotheses)  
   3.5 Synthesize information found in primary literature  
   3.6 Use technical terms accurately  
   3.7 Make and evaluate impactful and well-captioned visuals (figures, charts, tables) and provide sufficient explanation for non-text (visual) messaging  
   3.8 Cite sources appropriately and correctly to avoid plagiarism  

4. **Make persuasive recommendations**  
   4.1 Distill key points of science, economics, social or cultural perspectives to make a recommendation  
   4.2 Advocate for a choice, action, outcome, and/or behavior change by addressing multiple perspectives  
   4.3 As and when appropriate, add value-based opinions  

5. **Organize content logically**  
   5.1 Transition from analysis of results to discussion of implications and making recommendations as appropriate  
   5.2 Differentiate between claims and evidentiary support  
   5.3 Organize in ways that logically and cohesively tracks the evolution of ideas e.g., chronological narrative or story-style  
   5.4 Summarize large amounts of background data  

6. **Revise and proofread**  
   6.1 Revise to ensure that ideas flow logically both within and between paragraphs  
   6.2 Demonstrate a command of grammar and composition  
   6.3 Revise to ensure that sentences are concise and well-constructed  

**Section 3: INTEGRATION OF WRITING INTO UNIT’S UNDERGRADUATE CURRICULUM**

*How is writing instruction currently positioned in this unit’s undergraduate curriculum (or curricula)? What, if any, course sequencing issues impede an intentional integration of relevant, developmentally appropriate writing instruction?*

- × There have not been substantial revisions to this section of the Writing Plan.  

- □ There have been substantial revisions to this section of the Writing Plan. (Discuss these explicitly.)

ESPM is built around an integrated core of classes that stress the linkages among science, management, policy, education and business initiatives. Each year students take an integrated core class. During the 1st year students take a combination of communication, basic and applied science, policy, and economic classes, along with liberal
education requirements. In the second year, students select one of five specialization sub-plans: Conservation and Resources Management, Environmental Education and Communication, Environmental Science, or Policy/Planning/Law and Society. The only major curricular revision is the removal of Corporate Environmental Management as an ESPM Sub-plan. (It was moved to another major in CFANS.) During 2016-2017 three new Sub-plans are being prepared for consideration by the ESPM faculty. To-date there is no specific timeline for a review and vote on these Sub-plans. They have not been included in the WEC Year 2nd Edition Writing Plan but may be integrate into the existing plan for Year #2 if they are approved in academic year 2017-18.

ESPM writing across the curriculum was evaluated in two ways, 1) writing within the integrated core that all ESPM students take in a step-wise manner over their academic program and 2) key courses within the four sub-plans. Appendix B provides a matrix which describes writing abilities that receive explicit instruction in ESPM courses (6 Integrated Core courses and 15 Sub-plan courses) and the instructors’ perception of the proficiency level most students enter the course (WEC Meeting #3 Matrix).

**Section 4: ASSESSMENT OF STUDENT WRITING**

*What concerns, if any, have unit faculty and undergraduate students voiced about grading practices?*

Please include a menu of criteria extrapolated from the list of Desired Writing Abilities provided in Section II of this plan. (This menu can be offered to faculty/instructors for selective adaptation and will function as a starting point in the WEC Project’s longitudinal rating process.).

- [ ] There have not been substantial revisions to this section of the Writing Plan.
- [ ] There have been substantial revisions to this section of the Writing Plan. (Discuss these explicitly.)

Over the 2015-2016 Academic Year, ESPM faculty met four times to evaluate writing within the curriculum and identify an agreed upon list of ESPM writing abilities and evaluation criteria for these abilities (Table 1). The primary faculty concerns about grading writing were the amount of time necessary to provide extensive feedback as well as the difficulty of providing clear writing prompts for classes with wide-ranging writing abilities.

**Table 1.** Environmental Sciences, Policy and Management (ESPM) writing abilities and evaluation criteria, generated in 2015-16 by the ESPM Faculty based on a review of survey results and four faculty discussions.

<table>
<thead>
<tr>
<th>Faculty-generated list of writing abilities expected of Environmental Sciences, Policy, and Management (ESPM) students</th>
<th>Faculty generated evaluative criteria (What observable textual features can be used to evaluate the student’s ability?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student…</td>
<td>The text.....</td>
</tr>
<tr>
<td><strong>1. Intentionally and sensitively address specific readers</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Set up problems in ways that pique reader interest</td>
<td>Sets up problems in ways that pique reader interest</td>
</tr>
<tr>
<td></td>
<td>Interpret technical data and translate findings in ways that can be understood by specific audiences</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.3</td>
<td>Write with cultural sensitivity and avoid alienating audiences by anticipating the impact of word choices on different populations</td>
</tr>
<tr>
<td>1.4</td>
<td>Communicate across disciplines to demonstrate an awareness of where one subfield ends and another begins</td>
</tr>
<tr>
<td>1.5</td>
<td>Use professional language and specific, technical language where appropriate for audience</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Describe processes, sites, and data</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Describe sites accurately, objectively, and using audience-appropriate terminology</td>
</tr>
<tr>
<td>2.2</td>
<td>Avoid superfluous details</td>
</tr>
<tr>
<td>2.3</td>
<td>Create accurate, unbiased descriptions that demonstrate an understanding of the science and its implications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Make and provide evidence for claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Offer a well-developed thesis</td>
</tr>
<tr>
<td>3.2</td>
<td>Search for, select, and use data and examples that readers will find appropriate, adequate, and credible</td>
</tr>
<tr>
<td>3.3</td>
<td>Analyze data by distilling it and interpreting the distillation</td>
</tr>
<tr>
<td>3.4</td>
<td>Demonstrate familiarity with scientific process (collecting, analyzing data and testing hypotheses)</td>
</tr>
<tr>
<td>3.5</td>
<td>Synthesize information found in primary literature</td>
</tr>
<tr>
<td>3.6</td>
<td>Use technical terms accurately</td>
</tr>
<tr>
<td>3.7</td>
<td>Make and evaluate impactful and well-captioned visuals (figures, charts, tables) and provide sufficient explanation for non-text (visual) messaging</td>
</tr>
<tr>
<td></td>
<td>Provides sufficient explanation for non-text (visual) messaging</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>4. Make persuasive recommendations</strong></td>
<td></td>
</tr>
<tr>
<td>4.1 Distill key points of science, economics, social or cultural perspectives to make a recommendation</td>
<td>Distills key points of science, economics, social, and/or cultural perspectives in order to make a recommendation</td>
</tr>
<tr>
<td>4.2 Advocate for a choice, action, outcome, and/or behavior change by addressing multiple perspectives</td>
<td>Advocates for a choice, action, outcome, and/or behavior change by addressing multiple perspectives</td>
</tr>
<tr>
<td>4.3 Differentiate between a value based argument and an evidence based argument and can discern when each would be appropriate.</td>
<td>Adds value-based opinions as and when appropriate</td>
</tr>
<tr>
<td><strong>5. Organize content logically</strong></td>
<td>Demonstrates writer’s ability to effectively choose between making value-based arguments making evidence based arguments.</td>
</tr>
<tr>
<td>5.1 Transition from analysis of results to discussion of implications and making recommendations as appropriate</td>
<td>Transitions from analysis of results to discussion of implications</td>
</tr>
<tr>
<td>5.2 Differentiate between claims and evidentiary support</td>
<td>Delineates between claims and evidentiary support</td>
</tr>
<tr>
<td>5.3 Summarize large amounts of background data</td>
<td>Summarizes large amounts of background data by identifying trends and anomalies</td>
</tr>
<tr>
<td>5.4 Use organizational structures that enhances their writing goal and intended audience</td>
<td>Is organized in a way that enhances writer’s goals and addresses the intended audience</td>
</tr>
<tr>
<td>5.5 Incorporate lower-level organization devices such as topic sentences and transitional phrases to increase flow within a paragraph</td>
<td>Incorporates lower-level organization devices such as topic sentences and transitional phrases to increase flow within paragraphs</td>
</tr>
<tr>
<td><strong>6. Revise and proofread</strong></td>
<td></td>
</tr>
<tr>
<td>6.1 Revise to ensure that ideas flow logically both within and between paragraphs</td>
<td>Arranges and transitions between ideas so that they flow logically both within and between paragraphs</td>
</tr>
<tr>
<td>6.2 Demonstrate a command of grammar and composition</td>
<td>Demonstrates a command of grammar and composition</td>
</tr>
</tbody>
</table>
6.3 Revise to ensure that sentences are concise and well-constructed

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is composed of concise, well-constructed sentences</td>
<td></td>
</tr>
</tbody>
</table>

Section 5: SUMMARY OF IMPLEMENTATION PLANS, including REQUESTED SUPPORT and RELATION TO PREVIOUS IMPLEMENTATION ACTIVITIES

What does the unit plan to implement during the period covered by this plan? What forms of instructional support does this unit request to help implement proposed changes? What are the expected outcomes of named support?

How do the implementation plans of the 2nd edition Writing Plan relate to implementation activities from the 1st edition Writing Plan? What has been successful? What was not successful? How do implementation plans build on what was learned from the first year of implementation?

For the 2nd edition of the ESPM Writing Plan, we move from practical instructor-targeted workshops to a structural analysis of writing across the ESPM curriculum as well as community building (Table 1).

First, we propose the development of an ESPM writing assignments matrix across courses. In the Fall we will gather the syllabi and writing assignments for the Integrated Core Courses (5 total). All ESPM students take these courses based on the year they join ESPM (e.g. 1st Year students take 1000-4000-level courses, transfer students often take 2000 to 4000-level courses). The Integrated Core Course Faculty will meet to review the writing assignment matrix, identify where there are gaps in addressing writing attributes, where there are strengths we want to maintain, and initial ideas for how gaps could be addressed. After modeling this activity with the Integrated Core Courses, in the Spring semester, faculty in each of the Sub-plans will conduct the same activity for select core courses within their Sub-plans. We will use all this information as a basis for faculty discussion and reflection about writing progression, objectives, repetition, gaps, and plans for changes based on instructor suggestions. Using summary reports from the matrices and faculty discussion, we will host small group feedback sessions with students and employers, respectively. Our hope is that students and employers can provide additional insights regarding implications of these potential changes that can we addressed during implementation. In year three of our writing plan, we will implement the changes in the writing assignments and evaluate the use of these assignments for their desired purpose. The instructors and students in individual courses will do the evaluations and share the summary results. The WEC liaison and WEC staff will provide tools for the evaluation and if desired help conducting the evaluation. A brief progress report will be shared with the ESPM faculty in year three.

Reflection and discussion about the writing assignments will be done in small groups at first, Integrated Core instructors then Sub-plan instructors, with a final full faculty meeting to examine writing across the curriculum.
Initial guiding questions for the small faculty meeting:

1. What patterns do we see in writing activity strengths and good fit with the field(s)?
2. Where is there repetition and where are there gaps? What changes should we make, if any?
3. How do these assignments contribute to course SLOS?

The WEC staff instructional support we need is to help the WEC Liaison and WEC RA develop criteria for the writing assessment inventory and best practices for matrix development. In addition, we would like WEC staff feedback on writing assignment patterns they see once we have the matrix developed. Finally, facilitation of the following meetings: 1) one small group student feedback session; 2) one small group employer feedback session; and 3) a final full faculty meeting to review the curricular information and potential activities for the 3rd Edition Writing Plan based on the ESPM curricular matrix of writing abilities and reflections.

The ESPM writing assignment matrix reflections will provide a better understanding of writing across the ESPM curriculum and some insights into strength and areas that need new approaches.

Second, an annual employer panel discussion will help us share writing insights and explore the diversity of writing approaches within our fields. Based on the example of successful employer panels used by other majors in the WEC program, we will invite undergraduates, graduates, and faculty to this community-wide program event. Panelists would come from government agencies, environmental science consulting firms, non-government organizations, and businesses. With very few full ESPM focused events, this writing-in-the-workplace panel may evolve in its purpose; the first year would establish communication/writing as a core value within ESPM. Panelists will discuss the types of writing they do within their jobs and focus on one exemplar. The panelists and audience will explore why these types of writing are important to the field and what elements make them effective. To wrap up, the panelists will reflect on where they see writing and written products going in the next five years, if and how this will change. Student and faculty will be able to ask questions about how writing compares in importance to other skills or were employers see the greatest strengths vs. weaknesses among new hires. The panelist’s workplace examples will be saved in the ESPM WEC faculty resources file for use in class exercises (based on permission of the panelist). A short survey at the end of the event will provide suggestions for next year’s topic and other options for similar events. In the long-run this could include recognition of ESPM student scholarship awards, ESPM faculty awards, and speakers with a special focus on science writing (e.g. journalism and writing about ‘alternative science facts’).

Table 1. Summary of ESPM 2nd Edition Writing Plan Activities
<table>
<thead>
<tr>
<th>Activity</th>
<th>Fall 2017</th>
<th>Spring 2018</th>
<th>Fall 2018</th>
<th>Spring 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Writing Assignment Mapping and Implementation</strong></td>
<td>Collect, analyze, &amp; map writing assignments in the Core Courses</td>
<td>Collect, analyze, &amp; map writing assignments in the 4 Sub-Plan Core Courses</td>
<td>Mapping of ESPM courses not already included and meetings among respective faculty interested in evaluating writing assignments</td>
<td>Implementation of instructor writing assignment modifications and communication tools</td>
</tr>
<tr>
<td></td>
<td>Develop student and faculty friendly communication tools for the writing assignments across the Core and Sub-Plan courses</td>
<td>Develop student and faculty friendly communication tools for the writing assignments across the Core and Sub-Plan courses</td>
<td>Develop student and faculty friendly communication tools for the writing assignments across the Core and Sub-Plan courses</td>
<td>Develop student and faculty friendly communication tools for the writing assignments across the Core and Sub-Plan courses</td>
</tr>
<tr>
<td><strong>Faculty Meetings</strong></td>
<td>Core course instructors meet to evaluate the results of the map and make decisions about any changes</td>
<td>For each Sub-Plan, instructors for the Sub-Plan core courses meet to evaluate the results of the map and make decisions about any changes</td>
<td>Core and Sub-Plan core course instructors meet to review progress of implementation and possible adjustments in the map or communication tools and make decisions about any changes</td>
<td>Core and Sub-Plan core course instructors meet to review progress of implementation and possible adjustments in the map or communication tools and make decisions about any changes</td>
</tr>
<tr>
<td><strong>Student Focus Group</strong></td>
<td>Small student focus group: feedback on the writing assignment maps and draft communication tools</td>
<td>Small student focus group: feedback on the writing assignment maps and draft communication tools</td>
<td>Small student focus group: feedback on the writing assignment maps and draft communication tools</td>
<td>Small student focus group: feedback on the writing assignment maps and draft communication tools</td>
</tr>
<tr>
<td><strong>Employee Focus Group</strong></td>
<td>Small employer focus group: feedback on the writing assignment maps and draft communication tools</td>
<td>Small employer focus group: feedback on the writing assignment maps and draft communication tools</td>
<td>Small employer focus group: feedback on the writing assignment maps and draft communication tools</td>
<td>Small employer focus group: feedback on the writing assignment maps and draft communication tools</td>
</tr>
<tr>
<td><strong>Workplace Writing Panel, ESPM Event</strong></td>
<td>1st Workplace Writing Panel Event scheduled and evaluated by participants</td>
<td>Possible 2nd Workplace Writing Panel Event modified and schedule based on feedback from the first event</td>
<td>Possible 2nd Workplace Writing Panel Event modified and schedule based on feedback from the first event</td>
<td>Possible 2nd Workplace Writing Panel Event modified and schedule based on feedback from the first event</td>
</tr>
<tr>
<td><strong>Instructor Use of Workplace Materials</strong></td>
<td>If panelists share workplace materials, organize and catalog these for internet access by faculty</td>
<td>Highlight workplace writing examples for faculty and suggest how they might use them</td>
<td>Continue to build the workplace materials portfolio, if faculty use it</td>
<td>Continue to build the workplace materials portfolio, if faculty use it</td>
</tr>
<tr>
<td></td>
<td>Document and feature how faculty have used these materials in teach, online and/or at the 2nd Event</td>
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<td>Document and feature how faculty have used these materials in teach, online and/or at the 2nd Event</td>
<td>Document and feature how faculty have used these materials in teach, online and/or at the 2nd Event</td>
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</tbody>
</table>
In the 1st year, we focused on practical instructor-targeted workshops designed to help with redesigning effective writing assignments, 5-minute writing assignments, and writing for diverse audiences. While these helped assignments for specific classes, they did not provide a structural analysis of ESPM writing. In the workshops, someone would say ‘it would be great to know what others are doing’ or ‘how does our writing instruction build through the coursework.’ Also, these workshops involved faculty and a few teaching assistants but not the students or employers in our field(s). We successfully pulled together a core group of faculty from across different departments willing to work on writing in their class. What we were not able to do was get more faculty involved in re-designing their assignments. A structural analysis of writing across the ESPM curriculum will engage all the ESPM courses and hopefully the full faculty. This will be done by talking with faculty members about their writing assignments, and as a full faculty discussing the findings from the curriculum writing map. To take the discussion further, the employer panel discussion about workplace writing will engage students, faculty and employers in a discussion about writing in our field(s). Hopefully, the 2nd Year activities will increase the prominence of writing as some we discuss, examine, and care about together.

Section 6: PROCESS USED TO CREATE THIS WRITING PLAN

How, and to what degree, were stakeholders in this unit (faculty members, instructors, affiliates, teaching assistants, undergraduates, others) engaged in providing, revising, and approving the content of this Writing Plan?

Faculty members, representing two departments (Department of Soil, Water, and Climate; Department of Forest Resources) were the primary participants in the early discussion of and voting for this writing plan. Faculty from all four departments participated in a vote to identify strategies we should use in the 2nd Edition Writing Plan (Appendix A). The averaged ranking of the activities identified the four options in the following order (lower score is better): across the curriculum 2.15, employer panel 2.2, workshop on efficient and ethical methods for grading 2.38, and workshop on time efficient feedback 3.19 (28/49 possible votes). We will move the lower ranked workshop ideas to the 3rd Edition Plan as well as ideas solicited through the other options open comment category. We made an effort to have participation by faculty members who represent all Sub-Plans and the ESPM Coordinating Committee. Based on the full consultation, the final Writing Plan vote was by the ESPM Coordinating Committee members, representatives from all the Sub-Plans.
V. WEC Research Assistant (RA) Request Form

This form is required if RA funding is requested. If no RA funding is requested please check the box below.

☐ No RA Funding Requested

RAs assist faculty liaisons in the WEC Writing Plan implementation process. The specific duties of the RA are determined in coordination with the unit liaison and the WEC consultant, but should generally meet the following criteria: they are manageable in the time allotted, they are sufficient to their funding, and they have concrete goals and expectations (see below).

RA funding requests are made by appointment percent time (e.g., 25% FTE, 10% FTE, etc.). Appointment times can be split between two or more RAs when applicable (e.g., two 12.5% appointments for a total of 25% FTE request). Total funds (including fringe benefits when applicable) need to be calculated in advance by the liaison, usually in coordination with administrative personnel.

Please note that, outside of duties determined by the liaison, WEC RAs may be required to participate in specific WEC activities, such as meetings, Moodle discussion boards, and surveys.

- **RA Name (Use TBD for vacancies):** TBD
  - **RA Contact Information:** email TBD, phone TBD
- **Period of appointment (Semester/Year to Semester/Year):** Fall/2017-Spring/2018-Fall/2018
  - **RA appointment percent time:** 25%

- **Define in detail the tasks that the RA will be completing within the funding period:**
  Collect syllabi and writing assignments for all ESPM courses, inventory the writing assignments, analyze the data with the WEC liaison, graph/map the results for easy understanding by ESPM faculty and administration, prepare reporting materials for the faculty website, communicate with faculty about meetings to review the ESPM curriculum maps and writing abilities.
  Develop communication materials for the employer’s writing panel in consultations with WEC liaison, WEC staff, and faculty; Promote the writing panel event; Analyze feedback forms to inform the ESPM program and 3rd Edition draft components to support report on the products and outcomes of 2nd Edition Initiatives: products, participant feedback, ESPM curriculum writing map, needs for 3rd Edition.

- **Define deadlines as applicable (please note that all deadlines must be completed within the funding period):**
  September 07, 2017 – Jan 10, 2019
  Communicate with faculty and WEC staff about meetings and scheduling;
  Inventory and Graphing of Writing Assignments (Curriculum Maps-Core Courses Fall’17,’89), Employer Writing Panel- Fall ’17, ’18), inventory and graphing of writing assignments (Curriculum Maps – Track courses Spring/Fall’17, ‘18), Faculty meetings to review and discuss the curriculum maps and possible changes (Spring).
• Describe how frequently the RA will check in with the liaison:
  Weekly

• Describe in detail the RA’s check-in process (e.g., via email, phone, in-person, etc.):
  In-person, email, and phone as appropriate to the tasks.

1 An example for determining funding for appointments can be found on the WEC Liaison Moodle. This is for planning and example purposes only and cannot be used to determine final budget items for the Writing Plan.
ESPM + WEC
BEYOND YEAR ONE

Writing Enriched Curriculum (WEC) is a process for ESPM to ensure that students develop critical writing abilities.

THIS YEAR

Three Teaching Workshops
WEC Tool Monitoring & Evaluation
Annual TA Workshop

DESIRED ABILITIES

When ESPM students graduate they should be able to...

- Describe processes, sites, and data
- Make, and provide evidence for claims
- Organize content logically
- Make persuasive recommendations
- Revise and proofread
- Intentionally and sensitively address specific readers

FACULTY POLL

FUTURE ACTIVITIES

Looking towards the next two academic years, which of the activities below should be a priority for ESPM? Please rank the following four options from least (1) to most (4) important for ESPM to focus on.

1. Core and track analysis of instructional materials for mapping of writing across curriculum
2. Employer panel discussion about workplace writing for undergrad, grad, post doc, and faculty
3. Workshop focused on efficient and ethical methods for grading student writing
4. Workshop focused on responding to student writing in a time efficient manner

Other ideas for future activities?

Name:
## VI. WEC Writing Plan Requests

**Unit Name:** Environmental Sciences, Policy, & Mgt.

### Financial Requests
*requests cannot include faculty salary support*

**Total Financial Request:** $24,888.00

<table>
<thead>
<tr>
<th>Item</th>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESPM WEC 25% TA (salary 4,262.75, Fringe 4,381.25)</td>
<td>$8,644.00</td>
<td>$8,644.00</td>
<td>$3,200.00</td>
</tr>
<tr>
<td>Employer Panel: Writing in the Workplace Reception-food</td>
<td>$400.00</td>
<td></td>
<td>$400.00</td>
</tr>
<tr>
<td>Core Course: Curriculum Map Meeting-treats x 1 meeting</td>
<td>$30.00</td>
<td>$120.00</td>
<td></td>
</tr>
<tr>
<td>4 Sub-Plan Courses: Curriculum Map Meeting-treats x 4 meetings</td>
<td></td>
<td></td>
<td>$90.00</td>
</tr>
<tr>
<td>Student Focus Group; Employee Focus Group - food</td>
<td></td>
<td>$60.00</td>
<td></td>
</tr>
</tbody>
</table>

**Semester 1 Total:** $9,074.00  
**Semester 2 Total:** $8,824.00  
**Semester 3 Total:** $3,690.00

**Rationale for costs and their schedule of distribution**

See Proposal

---

### Service Requests
*drop-down choices will appear when a cell in the "service" column is selected*

<table>
<thead>
<tr>
<th>Service</th>
<th>Qty</th>
<th>Semester 1</th>
<th>Service</th>
<th>Qty</th>
<th>Semester 2</th>
<th>Service</th>
<th>Qty</th>
<th>Semester 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>2</td>
<td></td>
<td>Consultation</td>
<td>2</td>
<td></td>
<td>Consultation</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Description and rationale for services**

Each year the consultations will be about ideas for how to develop an effective and efficient curriculum map of writing assignments/attributes: evaluation.
Each year the consultations will be about ideas for how to develop an effective and efficient curriculum map of writing assignments/attributes: evaluation criteria, easily accessible ways for faculty to provide their materials, questions we could use to 'interrogate/evaluate' the data, WEC staff perspectives on gaps, communication tool diversification for different audiences. The 'other' is facilitation for the final faculty that evaluates the 2nd Edition Writing Plan Activities and where to go in the next years.
### Semester 4:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hrly. Labor to track implementation, communication tool redesign ($12/hr)</td>
<td>$3,200.00</td>
</tr>
<tr>
<td>Full faculty meeting to review writing attributes in curriculum map and communication tools—treats</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

**Semester 4 Total:** $3,300.00

### Semester 4:

<table>
<thead>
<tr>
<th>Service</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Consultation</td>
<td>1</td>
</tr>
</tbody>
</table>
July 5, 2017

To: Kristen Nelson
From: Robert McMaster, Office of Undergraduate Education
Subject: Decision regarding WEC plan and funding proposal

The Department of Environmental Sciences, Policy, and Management recently requested the following funding to support its Writing Enriched Curriculum:

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2017</td>
<td>25% RA</td>
<td>$8,644.00</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>Employer panel: Writing in the workplace reception, food</td>
<td>$400.00</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>Core Course: Curriculum Map Mtg (treats x 1 mtg)</td>
<td>$30.00</td>
</tr>
<tr>
<td>Spring 2018</td>
<td>25% RA</td>
<td>$8,644.00</td>
</tr>
<tr>
<td>Spring 2018</td>
<td>4 Sub-plan Courses: Curriculum Map Mtg (treats x 4 mtgs)</td>
<td>$120.00</td>
</tr>
<tr>
<td>Spring 2018</td>
<td>Student Focus Group; Employee Focus Group- food</td>
<td>$60.00</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Hourly labor to track implementation, communication tool redesign ($12/hr)</td>
<td>$3,200.00</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Employer panel: Writing in the workplace reception, food</td>
<td>$400.00</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>Additional ESPM courses added to the curriculum map (treats x 3 mtgs)</td>
<td>$90.00</td>
</tr>
<tr>
<td>Spring 2019</td>
<td>Hourly labor to track implementation, communication tool redesign ($12/hr)</td>
<td>$3,200.00</td>
</tr>
<tr>
<td>Spring 2019</td>
<td>Full faculty meeting to review writing attributes in curriculum map</td>
<td>$100.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>$24,888.00</td>
</tr>
</tbody>
</table>

The Office of Undergraduate Education and the Campus Writing Board thank you for your continued dedication to the Writing Enriched Curriculum program and appreciate your ongoing efforts to further integrate writing into your department.

All items above have been approved by the Office of Undergraduate Education, for a total of $24,888.00. Please email Pat Ferrian (ferri004@umn.edu) and Molly Bendzick (mollyb@umn.edu) within 30 days of the receipt of this letter with the EFS account string in your department that will receive these funds. **Pat will transfer $17,898.00 in FY18, and $6,990.00 at the start of FY19.**

The committee did note that approximately $17,000 was requested to provide hourly wages to undergraduate student workers. If the amount expended is less than that projected, the department should propose a use for leftover funds to the Board in its 3rd edition Writing Plan (2019).

CC: Molly Bendzick, Dan Emery, Pat Ferrian, Pamela Flash, Amber Kevelin, Matt Luskey, Bryan Mosher, Jennifer Reckner, Rachel Rodrigue, Leslie Schiff