UNIVERSITY OF NEW HAMPSHIRE WRITING PROGRAM

Resource Guide for Department Writing Goals, Outcomes, and Assessment

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(Update)

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I. Overview. This resource is intended to help departments meet the New England Commission of Higher Education (NECHE, previously known as NEASC) and Faculty Senate requirements for including writing among learning goals and outcomes statements, and more importantly to provide practical advice for implementing department-owned writing assessment. It is not intended to supplant writing goals, outcomes, or assessment plans that departments may already have in place. It offers methods that could inform existing plans or be adopted to address requirements and meet UNH aims. In the interest of brevity, this guide will outline one common method of direct assessment (there are others). The Writing Program is available to assist with implementing any or all aspects of this guide or to consult on other assessment models.

II. Background. Although local, user-owned assessment is the ideal, it would be naïve to suggest that compliance with external accreditors does not shape assessment. Recent initiatives such as the update of the UNH academic program review guidelines and the creation of learning outcomes to meet NECHE standards have foregrounded these external prompts. However, internal and external aims need not be mutually exclusive. During her recent visit to UNH, nationally recognized expert on academic assessment Barbara Walvoord offered that the most effective means for addressing writing for both internal and external purposes was to integrate writing outcomes into department program review guidelines, a method also mentioned in her signpost text *Assessing and Improving Student Writing in College*. This is not a new idea at UNH. Department-centered planning has always been a tenet of writing across the curriculum, one that has been validated by internal and external reviewers and the UNH Faculty Senate. Thus, including writing in department goals, outcomes, and assessment plans will not only address compliance with external requirements such as NECHE (Standards 4 and 8), UNH program review guidelines, and Faculty Senate Motion XXI-M16, but will also make attention to writing--and the good work being done by faculty at UNH--more visible and systematic.

Summary of Requirements:
Writing in NECHE Standard 4:
- 4.11 Students completing an undergraduate or graduate degree program demonstrate collegiate-level skills in the English language.
- 4.15 Graduates successfully completing an undergraduate program demonstrate competence in written and oral communication in English.

From UNH Faculty Senate Motion #XXI-M16 (See Appendix A for the Full Motion):
- Under the new [NECHE] accreditation standards, departments will be required to address "educational effectiveness" (Standard 8, pp. 24-25). Each department will therefore be prompted to review its effectiveness in implementing the goals of the Writing Program. We charge the shepherds of the [NECHE] process with communicating with departments the need to reflect on their approaches to WI *and Writing across the Curriculum** in their program reports.

From the 2016 UNH Writing Program External Review (On Department Goals and Outcomes):
- Connect WI offerings to department outcomes, ensuring that departments have made strategic decisions about the placement of WI courses throughout the major.

From the 2016 UNH Writing Program Self-Study (Department Plans):
- The agency of departments is central to writing at UNH…as embodied in the implementation statement in the charter that reads, "The Writing Committee will not undertake a formal approval process for each course or department plan, but will cooperate with departments in their planning."
- Reports going back to 2000 recommend finding ways to prompt department planning and decentralizing agency for writing in the disciplines.

From the May 2017 UNH Academic Program Review Policy on the Undergraduate Curriculum:
- Discuss the effectiveness of courses recommended to fulfill Discovery, Inquiry, and Capstone requirements and those that fulfill the Writing Intensive requirement and support program *goals for writing in the discipline.**

*Emphasis added: WI courses are certainly important, but assessment and attention to writing in the discipline should not be confined to the WI course structure alone.

Why Department Assessment? There are several institution-wide assessment vehicles* that the Writing Committee and Writing Program are researching. However, institution-level assessments like this are of limited value given the many differing conventions and goals for writing across the curriculum. Put another way, the definition of good writing is contextual: disciplinary writing conventions in Marketing are different than those in Electrical Engineering, for instance. A complex writing landscape like this is best viewed in aggregate through multiple local assessments. Thus, the most meaningful assessments of student writing are going to be local: drawn from authentic writing done in the curriculum and examined by faculty who are expert in the discipline. Therefore, not only is department-based writing assessment the most valid, but it is also the most useful for practitioners who define and assign the writing.

*The Collegiate Learning Assessment (CLA) and the Writing Experiences Module for the National Survey of Student Engagement (NSSE)--the latter has now been instituted at UNH.

III. General Advice.

At its most basic, there simply should be some form of direct reference to writing among department goals and student learning outcomes. In other words, some language that goes beyond "communicate effectively" (for instance) to directly specify writing ("communicate effectively in writing…"). These references could be in the form of stand-alone writing goals and outcomes statements or as supporting points under other goals or outcomes.

As a core requirement of the undergraduate curriculum, writing intensive (WI) courses should certainly be mentioned and would have an important place, especially during curriculum mapping and step 3 of the assessment process (taking action). However, it is important to understand that assessment is focused on the outcome: student writing, which derives from practice done in the entire curriculum, to include non-WI courses. Thus, an assessment of student writing is not necessarily defined as an assessment of WI courses.

Unfortunately, methods (rubrics, training raters, etc) are often mistaken for assessment itself. Seeing assessment as research, however, makes methods subordinate to the reason the research is being undertaken (Johanek 2000). Starting by determining purpose—what the assessment is being used to find out and why—helps to inform the methods and tools.

IV. Implementing Assessment of Student Writing.

Just as with any assessment plan, writing assessment should include direct and indirect measures. Most departments have indirect assessment information readily available. Some examples would be faculty observations, syllabi, and input from students on their writing experiences. In many cases, some form of informal indirect assessment has already been done or is ongoing, faculty exchanging views on student writing being one example. In these cases, it would simply be a matter of systematically capturing and recording this information in order to use it more formally. The University Writing Program's *WI Syllabus Review Report* and *Student Exit Interviews* provide two "off the shelf" models that departments could adapt to implement indirect writing assessment at their level. Having a structured (and recorded) faculty discussion of writing in the major would be another. The UNH Writing Program is available to advise and assist in these efforts.

Moving beyond indirect assessment, this guide will outline steps and resources for conducting a direct assessment of student writing following the three standard assessment steps:

1) Establish goals/outcomes
2) Gather & analyze information
3) Consider information and take action

A. ESTABLISH WRITING GOALS AND OUTCOMES. CEITL has provided guidelines on constructing goals and outcomes statements in general. To agree upon and articulate writing goals and outcomes, departments will need to inventory writing activity and discuss disciplinary writing values. This process could include the entire department or be done by a designated body of faculty who would then report findings for wider review.

Summary: Writing Goals and Outcomes Definitions. Writing goals are conceptual, broad, and reflect intent. Writing goals can be thought of as inputs. Writing outcomes, like other student learning outcomes (SLOs), are more specific, sometimes thought of as outputs. A writing outcome would name a measurable product (output) in support of a goal (input).

1. Writing Goals. The charter establishing the Writing Program provides university-level guidance for departments on the intent and goals for writing at UNH. These goals have been reviewed and revalidated by internal and external reviewers and the Faculty Senate as recently as 2017. These can provide a starting point for department-level goals or could be adapted in the context of the department:

Goals for Writing at UNH (From the 1995 Motion Establishing the Writing Requirement)
As the cornerstone of any higher education, academic and disciplinary literacy is the concern of the entire faculty and the whole university curriculum. Understanding that literacy is a long-term developmental process, the university community is committed to the following goals for student writing and learning:
- Students should use writing as an intellectual process to learn material, to discover, construct, and order meaning.
- Students should learn to write effectively in various academic and disciplinary genres for professional and lay audiences.
- Students should learn to display competence with the generic features and conventions of academic language.

Writing assignments which support course and curricular objectives are strongly encouraged in all courses, whether they are designated Writing Intensive or not.

These institutional writing goals are necessarily broad in order to encompass the more specific goals that would obtain within the many domains at UNH. Department goals could be more specific. Department goals could also be gleaned from governing standards in the discipline, such as ABET for Engineering. The language of the UNH goals could also be used or restated. For instance, the "various academic and disciplinary genres" in the second UNH goal could be made into a more specific department goal that names the discipline and genres. This is not to say that UNH goals must be literally repeated in department language or that a separate set of stand-alone goals must be produced just for writing. Here is an example of a concise writing goal from the University of Rhode Island: **"**Write effective and precise texts that fulfill their communicative purposes." Writing could be also be included as a component under communication or literacy. The important point is that attention to writing should be made visible and explicit among goals (and outcomes) rather than assumed.

2. Writing Outcomes. Going beyond goals (inputs), the focus moves to measurable products (outputs). Outcomes statements articulate what it is that graduates should be able to do. These student learning outcome statement(s) are those that will be listed in accreditation reports (ie, to meet the "requirement"). Like other student learning outcomes (SLOs), writing outcomes are more specific than goals and linked to specific measurable products. As with goals, there may be an external governing body that provides guidance for a discipline. A department discussion of SLOs may resemble or be part of the same discussion that generated writing goals.

Writing SLOs may be stand-alone or imbedded in other SLOs. There also need not necessarily be many of them. Below are a few examples from other universities:

Example of a writing outcome as a stand-alone SLO:
•From the Indiana University--Purdue University of Indianapolis Dept of Mechanical Engineering:
    Ability to effectively write engineering reports and present reports orally. [Writing] Depict[s] organization, well prepared introduction, good grammar, correct spelling, good conclusions, effective graphical and visual aids.
•From the University of Northern Colorado Africana Studies:
    Demonstrate verbally and in writing knowledge of the interrelatedness and uniqueness of the experience of people of African descent.
Example of a writing outcome integrated into another SLO:
•From the Indiana University--Purdue University of Indianapolis Dept of Mechanical Engineering:
    Ability to design mechanical systems that meet desired needs, work in teams, communicate the design process and results in the form of written reports, posters, and/or oral presentations.
Example of a communication goal specifying writing linked to an integrative SLO:
•From the University of California, Berkeley, American Studies:
    III Written and Oral Communication Skills [Communication Goal]
        a. Students learn how to communicate effectively in written form, demonstrating the ability to formulate a well organized argument supported by evidence.
        b. Students learn how to communicate effectively orally, while demonstrating the ability to listen and respond to what others are saying.
        …
    V Integrative knowledge and skills [Integrative SLO]
        a. Students demonstrate their mastery of all of the above skills by writing a Senior Thesis that is a focused interdisciplinary research project in their specialized area of concentration.

B. GATHER AND ANALYZE INFORMATION. Having established student learning outcomes, the next step would be to devise assessment plans to measure them. These would ideally include both direct and indirect assessments. Indirect assessment has been briefly covered in the introduction to this section. For direct assessment of student writing, this guide will follow Barbara Walvoord's model:

> The most common way for departments to evaluate the writing of their own degree students is to collect a sample of end-point writing, evaluate the strengths and weaknesses of that writing, and then choose something to work on (*Assessing*, 52).

1. Gather an End-Point Writing Sample. As the name suggests, this would be some form of senior-level writing done in the curriculum. Applicable writing assignments might include a senior thesis, writing in the capstone, or some other significant writing event done near the end of the student's program. Given the culminating nature of end-point projects, they could be used to assess multiple SLOs, writing among them. The number of papers collected and read would depend on the number of students in the program or the size of classes. In a small program, all papers might reasonably be read. In larger programs, a representative cross-section could be read.

Having decided on a writing sample and size, logistics enter into the picture. Collecting and managing the artifacts, whether digital or hard copy, presents a challenge. Whatever the form, artifacts would need to be stripped of identifying personal information (student, instructor, class section) and assigned an anonymous identifier before being used for assessment. Regardless of mode, issues such as the following would need to be addressed:
    •The point and mode of collection from students.
    •The method for the central collection of papers (from instructors to department/course director).
    •The method for preparing papers for assessment.
    •The method for making papers accessible to readers.

Here is an example of a student-based collection method from the University of Kentucky:

> Please submit two copies of your final paper to the instructor. One copy will be graded by the instructor; the second copy will be used for SACS assessment and should be a clean copy, with only your social security number listed at the top of the page, with all other identifying information (your name, instructor name, and course and section number) removed.

If not already doing so, departments may institute a system for archiving all student end-point writing, such as theses or senior projects. This would provide a flexible, readily available resource for assessment and other purposes. This system might later be expanded to include writing samples from other points in the curriculum and/or portfolios of student writing.

2. Construct or Adapt a Rubric or Other Guide. Although there are other means for guiding direct assessment of student writing, in this guide we'll focus on using a rubric. It is important to understand that reading for programmatic assessment is not the same as grading. Thus, the rubric would need to be designed for the task or revised if adopted from a class. The earlier work done on department guidelines and writing outcomes should help to inform the choice and form of rubric. Departments may already have rubrics that address or include attention to writing provided by external accrediting agencies. If not, they may develop their own or adapt rubrics found elsewhere. Appendix F of this guide has a sampling of writing assessment rubrics for review.

Generally speaking, there are two kinds of approach: holistic, giving a single rating to a paper, and analytic, where each element of a rubric's criteria is rated separately, with the total equaling the rating. In this guide, we'll follow the holistic model of assigning a number from 1 (low) to 6 (high) for scoring—but with category ratings to support a more discrete discussion of the holistic findings. Appendix D has a detailed guide on conducting direct writing assessment along with a supporting rubric.

3. Select and Prepare Readers. Eligible readers should include experienced instructors familiar with writing in the discipline. Readers should prepare by arriving at a shared understanding of the terms and concepts relevant to the assessment and also should be versed in the assignment used to generate the writing sample. Before assessing student writing, readers should be normed.

To norm readers and achieve some degree of inter-rater reliability, readers should first read the same essay (or group of essays) and discuss score(s) using an existing rubric, if available. If possible, the facilitator would select writing samples illustrative of high, mid, and low range writing for this session. Readers would then read a few more papers, score them, compare scores, and discuss the features of each paper. When the group renders consistent ratings within 1 or 2 points, or they otherwise reach a consensus understanding, they are ready to read for assessment. Please refer to the "WSU Quick Guide for Norming" found in Appendix E of this guide for a more detailed discussion.

4. Read, Rate, Record. The reading process itself will depend on the number of readers, the amount of student writing, scheduling, and other logistical matters. Readers may work independently and then come together to share findings or convene for a group reading session (or sessions).

An optimum method for assessment would be to have each end-point writing sample read and scored separately by two readers. Results of this first read would be reviewed and recorded. For papers where the two scores were close (within 1 or 2 points), the average would be recorded; papers that had a wider split would be sent to a third reader and the average of the three scores would be recorded. If the number of papers was large or other resources were not available, papers might be distributed among several readers and given a single read instead.

Regardless of reading or rating method, a follow-on session should be held where readers come together

to have a discussion of trends and areas where student writing did and did not meet expectations. Consensus observations should be recorded and included with the numerical results. It is important to keep in mind that this process is to gain programmatic information as opposed to grading.

The following passage is an example analysis of a student learning outcome related to writing posted on the NECHE website:

During summer 20XX, a team of faculty and graduate students completed an outcomes-based assessment in cooperation with four academic departments. ... The good news: We discovered that students are composing long, source-driven papers on intellectually challenging topics. We determined—drawing on the expertise of nine faculty and graduate students scoring anonymous papers in their home disciplines—that of the 128 final papers collected for this study, 94% met at least minimal expectations for advanced writing in the major.... The not-so-good news: The overall quality score for 83% of papers fell between "minimally proficient" and "moderately proficient," which means that we saw a large clustering in the low-middle range. When comparing student performance by year in college, we did not find evidence that seniors are writing better papers than sophomores or juniors. We also noted that instructor grades did not correlate significantly with rubric scores, and that instructor grades were significantly higher than independent reader scores. All this suggests the need to set the bar higher in our writing courses and our grading.

C. TAKE ACTION. Consider how to address insights gleaned from assessment. One of the guiding principles for assessment is that it should be used to improve teaching and learning. Referring to the above example, a plan of action would provide details on implementing the general conclusion of [*setting] the bar higher in writing courses.*

1. Make Writing Activity Visible. In order to guide action, departments would first need to identify where writing happens. As defined points of writing in the curriculum, WI courses would figure prominently, although other courses should be included as appropriate. One mechanism for finding writing would be to refer to a curriculum map, a tool that indicates where SLOs (writing among them) were being practiced. In addition, UNH WI Guidelines could be used as a template to map specific kinds of writing activities (ie, which guidelines were being practiced where). Using these tools together would illustrate the locations, types, and kinds of writing practice—and also expose gaps in writing practice. It might be found, for instance, that writing practice was clustered in upper-division courses, which could suggest more attention to writing in lower-division courses, or that there was little drafting or revision (WI guideline #2) being done, which could suggest more emphasis on structuring process into assignments, or that there was an issue with terminology, which could suggest introducing disciplinary terms and vocabulary at certain points in the program.

2. Decide on Action: To guide action, Walvoord suggests answering three questions (*Assessment* 69):
1. What is most important?
2. Which areas show the greatest problems with learning?
3. What is feasible?

Here is a sampling of characteristic actions that departments might take (*Assessing*, 54-55).
    • Create a checkpoint for student writing early in a course or program, insisting on a minimum standard of writing students must meet. Provide support and help to the students.
    • Add a course in discipline-specific writing.
    • Include writing as an explicit goal and requirement in publications, program descriptions, presentations, and other communications with students and the wider community.
    • Exhibit student writing and oral communication by encouraging students to publicly present, publish work, and participate in poster sessions.
    • Support faculty development events to share and collaborate on ideas and practices.

Once again, WI courses would figure prominently as points of action, although non-WI courses should also be considered. The WI Guidelines could be used to recommend specific practices. A set of local guidelines derived from the broad UNH Guidelines could be produced to guide more specific writing practice in the program (Please see appendix C for a more detailed discussion). Assessing student writing might suggest action in related areas as well, such as information literacy—in which case, Dimond Library subject librarians may be of assistance.

3. Record and Report. Look forward. Programmatic assessment is not about scoring what has happened as much as it is about charting future directions. Walvoord notes that the story you tell of assessment may reach a number of audiences, both internal and external. In both cases, she recommends that this story include the following information (*Assessing* 46):

> • Learning goals or outcomes for student writing
> • How you analyzed the factors affecting student writing
> • Actions you took or are going to take
> • How you will know that those actions will be effective (ie, how will they be measured?)

V. Conclusion: Resources and Assistance. The UNH Writing Program is available to advise, assist, and facilitate in the development of writing goals and outcomes, and with assessment. The Writing Program may also be contacted for references and resources beyond those available in this guide. Beyond the UNH Writing program, there are other forms of assistance available.

A. UNH Partners for Assessment. CEITL is a resource that departments can contact for expertise, advice, and assistance with assessment. The Writing Program is available to assist and advise on all aspects of writing assessment. There are other agents at UNH that could also be engaged:

> •CEITL College Faculty Fellows
> http://www.unh.edu/cetl/ceitl-faculty-fellows
> •Writing Across the Curriculum Faculty Network Members
> https://www.unh.edu/writing/writing-across-curriculum-wac-faculty-network
> •College Writing Committee representative
> https://www.unh.edu/writing/university-writing-committee
> •Dimond Library Subject Librarians (for information literacy as related to writing)
> https://www.library.unh.edu/about-us/staff-directory/subject-librarians

B. Selected Websites. Below are a few useful websites with more information on writing goals, assessments, and department planning:

> •University of Montana Department Assessment Reports
> http://www.umt.edu/provost/faculty/deptreports/default.php
> •College Conference on Composition & Communication Position Statement on Writing Assessment
> http://www.ncte.org/cccc/resources/positions/writingassessment
> •University of North Carolina, Charlotte Center for Teaching and Learning Guide for using Bloom's Taxonomy for Teaching and Learning Objectives
> https://teaching.uncc.edu/services-programs/teaching-guides/course-design/blooms-educational-objectives

APPENDIX A

UNH Faculty Senate Motion XXI-M16

Motion from the Academic Affairs Committee
Motion on the Writing Program and Committee

MOTION #XXI-M16
Motion from the Academic Affairs Committee Motion on the Writing Program and Committee

1. Motion presenter: Scott Smith, chair of the Academic Affairs Committee

2. Dates of Faculty Senate discussion: 5/1/2017, 5/8/2017

3. Rationale: A self-study of the UNH Writing Program was submitted on March 3, 2016. An external review of the writing program was submitted on June 28, 2016. In it, the reviewers praised UNH's "enviable commitment to writing," but also noted tension as to who "owned" the Writing Program and what body would have the rights and responsibility to enact change. In particular, the external review noted

- an inconsistency in familiarity with the Writing Intensive requirement, the max capacity for WI courses, and the process to create WI courses.
- a proliferation of WI courses, especially at the upper level
- a lack of training for instructors teaching WI; some faculty "did not even know the course that they were assigned to teach had previously been approved as a WI course."
- the Writing Committee's (hereafter WC) lack of power to enact change or monitor the quality of writing courses; the reviewers implicitly suggest that this concern came from members of the WC, whether past or present, a fact that will become important below.
- A lack of "ownership" of WI courses at the college or departmental level; specifically, the reviewers note a lack of coherence or consistency across WI courses, and further detect a tension between WI courses and the larger goals of the university.

The Academic Affairs Committee was charged with studying the reports and making recommendations, which follow below; a contextualized discussion that led to them can be found in the accompanying AAC report dated April 27, 2017.

1. Under the new NEASC accreditation standards, departments will be required to address "educational effectiveness" (Standard 8, pp. 24-25). Each department will therefore be prompted to review its effectiveness in implementing the goals of the Writing Program. We charge the shepherds of the NEASC process with communicating with departments the need to reflect on their approaches to WI and Writing across the Curriculum in their program reports.

2. The CEITL organizational structure, under which the Writing Program is planned to reside, must provide adequate resources to provide faculty assistance and guidance to ensure a smoother and more effective implementation of our writing goals. Whether it should remain in this structure is to be reconsidered next year (see below, #5).

3. Even with the above recommendations, there must be a method to ensure accountability and a mechanism to eliminate WI courses that do not meet the requirements. As for the latter, we recommend a mandated sunset period, whereby every five years a department has to review and resubmit courses, with syllabi, that are to maintain the WI designation. Both the colleges and the WC would thus act in an *advisory capacity* to ensure that WI courses continue to meet the high standards

of UNH's writing program. Courses not resubmitted would lose the WI designation.[1] We feel that the original language of the charter (AAC Report p. 4) indicates such a review is warranted. A year of preparation will be warranted to ensure a smooth process; we therefore propose to begin in AY18–19.

4. Training for new faculty should include a segment on the Writing Program, its goals, Writing across the Curriculum, and Writing Intensive courses. Faculty teaching a WI intensive course for the first time should be strongly encouraged to undergo WI training, whether in the form of the many workshops offered by the Writing Program but unexploited by most faculty, or in an online training video.

5. The Faculty Senate should consider bringing the Writing Committee under its purview by making the Writing Committee a Faculty Senate Committee, similar to the Discovery Committee. Because this report comes at year's end, we believe it would be in the best interest of all to charge the Agenda Committee next year (AY17–18) with the task of examining the possibility.

4. Motion: **The Faculty Senate endorses the above recommendations and authorizes the Chair to forward them to the appropriate administrators for consideration.**

5. Senate action: Motion passed with 60 votes in favor, 1 vote opposed, and 1 abstention.

6. Senate chair's signature: Dante Scala

Forwarded to the following on May 9, 2017
        President Mark Huddleston
        Provost Nancy Targett
        P.T. Vasudevan, Senior Vice Provost for Academic Affairs
        Ed Mueller, Director, University Writing Programs
         All deans
        All department chairs_____

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[1] So as not to overwhelm either colleges or the Writing Program, a review of courses will somehow have to be staggered somehow so that 1/5 of courses would be subject to resubmission each year.

APPENDIX B

UNH Writing Intensive Course Guidelines

GUIDELINES FOR WRITING-INTENSIVE COURSES
With Summary

1. Has *substantial* writing, integral to the course: 50% of Grade (traditional writing assignments)
Students in the course should do *substantial* writing that enhances learning and demonstrates knowledge of the subject or the discipline. Writing should be an integral part of the course and should account for a significant part (approximately 50 percent or more) of the final grade.

Learning in any course includes learning the appropriate ways of reading, writing and thinking for that subject or discipline. Traditional writing assignments, such as senior theses, seminar papers, take-home and in-class essay exams, case studies, laboratory notebooks or reports, proposals, literature reviews, and field research should be considered as possible sources for satisfying the writing requirement. There is no single or universal formula for satisfying the WI requirement as courses naturally differ according to their level, form, and function. For example, General Education courses may emphasize writing-to learn strategies, while major courses may incorporate an additional focus on discipline-specific writing.

2. Employs writing regularly, as process, with feedback & revision (as part of course structure)
Writing should be assigned in such a manner as to require students to write regularly throughout the course. Major assignments should integrate the process of writing (prewriting, drafting, revision, editing). Students should be able to receive constructive feedback of some kind (peer response, workshop, professor, T.A., etc.) during the drafting/revising process to help improve their writing.

The quantity of the writing required is less important than how the writing is integrated into the course. For example, frequent short writing assignments (2-5pages) for which the student receives comments and an opportunity to revise can sometimes be more effective than long research papers submitted at the end of the course which receive comment and evaluation only after the course is over. Longer assignments can be broken up into stages or components with feedback at critical points to allow for a more effective writing/researching process and, ultimately, a more satisfying product

3. Uses writing as a learning/engagement method   (some role other than graded product)
The course should include both formal (graded) and informal (heuristic) writing. There should be papers written outside of class which are handed in for formal evaluation as well as informal assignments designed to promote learning, such as invention activities, in-class essays, reaction papers, journals, reading summaries, or other appropriate exercises.

Assigning work in a variety of genres for a variety of audiences can help students synthesize and apply disciplinary and interdisciplinary knowledge effectively. It is important that evaluation of writing be conducted by people trained in the conventions of the genre being used and be appropriate to the nature of the assignment. New writing and assessment strategies, such as portfolio and student self-assessment, are encouraged.

APPENDIX C

Guide for Discussing UNH WI Guidelines to Create
Department Guidelines

Discussion Guide for Producing Department Writing Guidelines

The UNH WI Guidelines (see Appendix B), which are often read as a set of requirements, can instead be read as a resource: each includes suggested practices for implementing a central concept—they provide the *how* of generating writing to meet specific ends. Put another way, if writing goals are the aims, and writing outcomes are the products, then writing guidelines are the bridge between the two, describing the practices to generate products to meet outcomes. Given the necessarily broad scope of the UNH guidelines, the suggested practices are list-like and not specific to any single context. As such, they do, however, provide a framework for constructing a derivative set of guidelines specific to writing in a particular major or discipline.

Rather than each faculty member having to reinterpret the UNH guidelines for themselves, these local guidelines would provide more specific guidance on writing in a program. They also would help to make writing activity more coherent and visible across courses, supporting both the transfer of student writing habits as well as step 3 of assessment (see page 8 of the guide).

In practical terms, producing local guidelines would first involve inventorying practice in light of each of the UNH guidelines and then articulating a departmental guideline. Creating a local guideline would start with the UNH Guideline and answer the question, "What should writing practice [in History, Chemistry, Philosophy, Marketing, etc.] look like under UNH Guideline [X]?"

The UNH WI Guidelines (in Appendix B) should be referenced in conjunction with the below advice for creating a local guidelines.

Guideline #1 focuses on "conventional" or transactive writing (term papers, reports, etc.).
Generally speaking, this guideline describes the familiar forms of academic writing that students do for grades. The guideline suggests that writing should be "substantial" and "integrated," but it does not mandate specific methods of implementation. A department discussion would inventory the types of meaningful writing done in the discipline, identify disciplinary conventions and standards (to include citation styles), and the importance of various tenets of standard written English (SWE). The resultant local guideline would articulate what "substantial" writing means in the discipline, the kinds of writing that students would produce to demonstrate learning, the weight and frequency ("integration") of writing in courses, and specific expectations for WI courses.

Guideline #2, broadly speaking, addresses the use of process (steps, revision, feedback) to help improve student writing. Approaching this guideline, departments would inventory methods that are used to guide and improve student writing. This discussion would lead to a local statement that articulates the local aims for "process, revision, and feedback" in the discipline. It would answer the question, "What should process and feedback used to improve student writing look like in [Chemistry, Economics, Electrical Engineering, etc.]?"

Guideline #3, broadly speaking, addresses writing to promote learning, or writing as an end in itself as opposed to a product. A discussion in this area would involve an inventory of the kinds of knowledge and thinking that are valued in the discipline and the ways that writing may be used to engage material and make student thinking visible. Typically, the writing under this guideline is of the low stakes or "informal" variety, providing a platform for students to write regularly and a means of integrating writing practice in the spaces between the formal writing events. This discussion would result in a local statement concerning the goals for and use of informal writing in courses. It might answer the question, "Outside of the transactional student writing forms in guideline #1, what kinds of writing are appropriate to use in our courses to promote student learning, thinking, and self-awareness?"

APPENDIX D

UNH Holistic Writing Assessment Guide

Holistic Writing Assessment Guide

A holistic writing assessment, as the name implies, approaches a written product as a complete unit, rendering a single rating rather than attempting to give analytic scores in multiple categories. Given the complexity of writing, this is an approach that is well suited to programmatic assessment in departments. It does not require "expert" knowledge of composition or rhetoric, but instead relies on readers' expertise to recognize what good writing is (or should be) in their own fields. For a holistic assessment to be useful, however, there still needs to be some shared understanding of terms and standards. In the absence of others, the below criteria could be used to structure a holistic writing assessment (and also to structure indirect assessment, such as faculty discussions of writing in the curriculum). Holistic assessment usually involves assigning a single rating (often 1-6) to a piece of writing, 1 being low and 6 being high. Numerical ratings conventionally are imagined to fall into High (5, 6), Mid (3, 4), and Low (1, 2) categories, with unsatisfactory papers being 1, possibly 2. Ratings may also be qualified, if desired, by plus and minus qualifications (3-, indicating a paper on the low end of the mid-range, for instance).

For the purposes of illustration, we offer the following writing outcome and criteria:

Graduates should communicate effectively in writing: writing should exhibit competence in four broad components: substance, organization, style, and correctness. Depending on the discipline or genre, these components may have differing weights and conform to differing standards. The end product, however, should reflect the author's control over the medium and ability to effectively communicate knowledge to specialist and general audiences. Writing should exhibit the following qualities:

Substance: What the author has to say (thoughtfulness, perceptiveness, factual accuracy, appropriate types and sufficient amounts of evidence)
Organization: How the words, paragraphs, sentences, and major divisions are arranged and relate to one another (orderliness of presentation, soundness of logical relationships and linkage to evidential support, overall intelligibility)
Style: The way the author conveys the message (fluency of language, appropriateness of tone, adequacy of vocabulary, effectiveness of sentence structure and variety, effectiveness of sentence combining and cohesion) and conforms to disciplinary conventions and expectations (voice, consideration of audience).
Correctness: Observance of the conventions (mechanics) of standard written English (spelling, punctuation, quotation & integration of sources, etc.), as well as the conventions of the discipline (formatting, documentation).

Putting the above model into use:

Before embarking on this step in practice, it will be important to ensure that readers know the context of the writing being examined. They will need to be familiar with the field, know the assignment, and understand the conditions and expectations under which the writing was done. It will also be important to norm the readers before assessment. Please refer to the WSU guide for norming readers found in Appendix E. In this guide, we'll look at two general approaches to assessment: constructivist and analytic.

It is also important to recall that although sample papers are going to be rated, the purpose for doing so is not grading but to derive program information. It is also important to keep in mind that this process is not to "grade" the program but to gather information to guide future directions. Finally, unlike grading, it could be that a distribution of results in the high range may not indicate an issue (ie. grade inflation). If an end-point writing sample (ie, senior thesis or capstone) involved extensive feedback and revision over an extended period, for instance, scores might very well be clustered in the 4-6 range, which would indicate meeting goals with good outcomes. In this case, findings in the individual criteria might be of interest.

CONSTRUCTIVIST APPROACH

A constructivist approach is informed by guidelines and standards but rather than using a detailed rubric, it relies on the reader's understanding of the assignment and context, applicable guidelines, and internalized knowledge of writing in the field. Put another way, the reader is the rubric. Readers would still need to be normed before assessment. Below is a constructivist guide that could support a holistic direct or indirect assessment of writing, along with some supporting categories.

A. Give the paper a continuous, rapid, single read.
B. Based on your impression and understanding of the context, rate the paper 1-6 (Low-High).
C. To support more discrete programmatic discussion, record similar ratings in each of the supporting areas and be prepared to discuss trends and observations.

1. **Demonstrates Mastery of Substance.**	**High**	**Mid**	**Low**
2. **Demonstrates Control Over Organization.**	**High**	**Mid**	**Low**
3. **Demonstrates Mature Style.**	**High**	**Mid**	**Low**
4. **Demonstrates Mastery of Correctness.**	**High**	**Mid**	**Low**

HYBRID APPROACH USING A RUBRIC IN SUPPORT OF HOLISTIC ASSESSMENT

A more conventional approach to assessment involves the use of rubrics, which are normally analytic and score multiple criteria. See Appendices E and F for other rubrics. For this guide, we've developed a hybrid rubric with score sheet that would support holistic writing assessment and the discrete scoring of supporting criteria. It is necessarily generic and could be useful as a starting point. If used, it should be considered in context and modified. For instance, it assumes that outside sources would be required and integrated, with analysis. If the assignment were creative and did not require sources, or if sources were to be reported or summarized as opposed to analyzed and integrated, the rubric would need to be adjusted. The rubric could also be revised in other ways, the scoring ranges, for instance, could be altered or eliminated. Rubric aside, these points highlight the need for readers to know the assignment as well.

The sample rubric allows the reader to assign an overall holistic rating of 1-6 for the paper. It also allows for a score to be assigned in each component area. When reading holistically, it is sometimes useful to first think in binary terms: is the paper satisfactory or unsatisfactory? Then, if satisfactory, determine whether it fits into the upper, middle, or lower range in order to arrive at holistic score.

The following process is offered as one model. It could be modified or other approaches used:

Here is a suggested holistic reading process.
> A. Give the paper a rapid, continuous read.
> B. Based on your impression, give the paper a holistic rating from 1-6 (1 low, 6 high).
> C. Then assign a rating of 1-6 in each of the four areas.
> D. Record ratings on the score sheet, along with any specific notes. Retain copies for reference.
> E. When done, submit score sheets to the agent who will be compiling results.

An optimum method for assessment would be to have each end-point writing sample read and scored separately by two readers. Score sheets would be collected and the results reviewed and recorded for each paper. If the two scores were close (within 1 or 2 points), the average would be recorded. Papers that had a widely-split decision (more than 2) would be sent to a third reader, and the average of the three ratings would be recorded. If there were a large volume of papers or conditions made it implausible for each paper to be read more than once, papers might be distributed among several readers and read once.

A follow-on discussion should be held where readers supplement numerical findings with a discussion of trends and areas where student writing did and did not meet expectations. Consensus observations should be recorded and considered alongside numerical results.

HYBRID RUBRIC TO SUPPORT HOLISTIC WRITING ASSESSMENT

Overall Rating 6 5 4 3 2 1	Exemplary High Range 6-5	Satisfactory Mid Range 4-3	Min. Standard or Unsat. Low Range 2-1
Substance What the paper has to say	**Explores the topic in a perceptive, thoughtful manner.** Conveys a clear understanding of the material. Synthesizes appropriate sources and evidence in support of author's insights, analysis and/or findings.	**Addresses the topic.** Demonstrates adequate or basic understanding of the material. Observations linked to appropriate evidence. May rely on summary but demonstrates an adequate attempt at findings beyond repeating or citing sources.	**Addresses the topic in a basic manner or fails to address the topic.** Exhibits a barely adequate or inadequate understanding. Evidence use problematic or insufficient, or not linked to observations. Little insight or findings beyond repeating source.
Organization How the written units work together	**Paper exhibits effective organizing principles that clearly meet expectations.** Structure supports or reinforces reading. Internal components (sections, paragraphs) are fully developed, unified, and arranged in support of the larger structure.	**Organizing principles are present and acceptable.** Major divisions of the piece can be identified and are logical. The internal components (sections, paragraphs) are adequately developed, arranged, and support the overall structure.	**Organizing principles are uneven, insufficient, or fail to conform to expectations.** Organization of the paper distracts from reading. Major units may be present, but internal components are unevenly or under developed and/or do not support the overall structure.
Style The way that the author "talks" in the paper	**Demonstrates a clear awareness of audience and context.** The authorial "voice" is in a near-expert "register" for the genre, level, and discipline (effective sentence structure, word use, brevity, tone, coherence, uses specialist terminology, etc). Writing smoothly integrates source material into the author's syntax.	**Demonstrates an adequate or generic approach.** The writing "register" may be less than expert, but still adequate for the genre, level, and audience (may exhibit wordiness, may use terms and at times usage alien to the discipline, etc.). Shows an awareness of handling source material: integrates source material into the flow of the paper in a manner that doesn't inhibit reading.	**Demonstrates a basic approach or struggles with discourse.** The writing is uneven, outside of expectations for the genre, level, and audience, or inhibits reading (absence of or misuse of disciplinary terms and phrasing, basic sentence patterns, lack of coherence or "flow," syntax & word use issues, etc..). Source material not integrated (or heavy reliance on "Cut and Paste").
Correctness The "mechanics" of the paper: both standard written English (SWE) and conventions of the discipline.	**Virtually Error Free.** Surface errors may be present but do not form a distracting pattern or undermine credibility. Meets the appropriate mechanical conventions of SWE and of the specific genre and discipline, to include citation format.	**Adequate Correctness.** Distracting surface errors may exist, but do not create a major credibility issue. Generally meets the conventions of SWE and the specific genre and discipline. Applies the correct citation format, possibly with minor errors.	**Problematic Correctness.** Exhibits fundamental issues with meeting conventions of SWE or the discipline. Surface errors combine to create a major distraction to reading or undermine the author's credibility. Uneven or absent application of the correct citation format.

Writing Assessment Score Sheet

Paper ID_____

Rater_____

_____Holistic Score 6-5 Exemplary
4-3 Satisfactory
2-1 Minimum Standard or Unsatisfactory

_____Substance

	6-5 Hi	Explores the topic in a perceptive, thoughtful manner.
	4-3 Mid	Addresses the topic.
	2-1 Low	Addresses the topic in a basic manner or fails to address the topic.

_____Organization

	6-5 Hi	Paper exhibits effective organizing principles that clearly meet expectations.
	4-3 Mid	Organizing principles are present and acceptable.
	2-1 Low	Organizing principles are uneven, insufficient, or fail to conform to expectations.

_____Style

	6-5 Hi	Demonstrates a clear awareness of audience and context.
	4-3 Mid	Demonstrates an adequate or generic approach.
	2-1 Low	Demonstrates a basic approach or struggles with discourse.

_____Correctness

	6-5 Hi	Virtually Error Free.
	4-3 Mid	Adequate Correctness.
	2-1 Low	Problematic Correctness.

Notes or Comments:

APPENDIX E

Washington State University "Quick Guide to Norming"

Office of Assessment of Teaching and Learning, Washington State University, June 2016

Norming, or calibration, is a process that brings a group of faculty raters together to decide how to assess student work in a consistent way, so that regardless of which rater assesses the work, the rating falls within a close range. The process is generally overseen by a facilitator, either from within the department or from outside, someone familiar with norming processes, using a rubric or similar scoring tool.

This quick guide offer a general approach for norming faculty who will be scoring student work for program-level assessment of student learning. Because each department, program and situation is different, we recommend that you consult with ATL to develop a process that is best for your specific circumstances, including the kind of student work you're assessing (such as, paper, project, presentation or performance) and the team of raters.

Norming for Program-level Assessment

Assessment at the program-level differs from grading student work in the course. Grading is the process of evaluating how well a student completed a given assessment or given class. Grading may include issues such as effort, timeliness, how much the student has improved in the semester, none of which necessarily reflect how students perform on specific learning outcomes. In program-level assessment, raters must recognize that they are not grading individual students, but rather providing information to the program about what and how well students are learning. (Instructors might also use a similar norming process to develop more consistent grading in a particular course.)

Because the purpose of program-level assessment is to determine how well the students are achieving the student learning outcomes, the students' class standings do not matter. For example, if raters are assessing first year student papers, they will not give additional points because a student's work is *good considering they are just starting at the university* or because it *would deserve an A in an introductory class*. Rather, faculty rate the student papers at the level the work demonstrates. The same holds true for student work from all class levels. While most programs expect their first year students to perform at the lower end of the rubric, and sophomores a bit higher, etc., raters should not, as a matter of course, assume what student scores will be before they rate the student work or assign points for anything except what is demonstrated in the student work. In this way, program-level assessment will generate data about student learning across the curriculum.

The Norming Process

Faculty raters come together to

a. Practice using the rubric on several samples of student work
b. Discuss scores and develop a shared understanding of how to apply the criteria at the program level
c. Develop consensus on scoring, so that reliable data can be generated for program assessment
d. Potentially: Identify sample work as "anchors" available to other raters, to provide clear examples of what different scores or levels of performance, look like. (Contact ATL for more information about developing or using anchors.)

The Norming Session

A group of faculty raters and a facilitator meet for 1-2 hours. Ideally, at least two samples of student work will be used. Having a range of student work quality (i.e., high-performance, mid-level performance and low performance) gives faculty members a chance to understand each other's perspectives about what constitutes strong performance. This process should be adjusted if the program has anchor papers available, a good practice as assessment matures.

1. **Context:** Information should be provided about the reason for the norming, how the information will be used and shared, how this session contributes to program assessment, how long the session should take, and what is expected of the participants.

2. **Materials:** Participants should take some time to get to know the rubric. Clarify if the ratings are to be holistic (one score for the entire rubric) or analytic (one score for each element on the rubric). Clarify if the norming session is for one element of the rubric, some elements of the rubric or for all elements rubric. (For example, it may not be necessary to score on all rubric elements if the program's assessment is focusing one 1-2 learning outcomes. Choosing a couple of learning outcomes is a good way to get started, focus attention, and manage the time investment.)

3. **Allow Time for Individual Ratings**: Participants are given time to read the first piece of student work, keeping the rubric in mind, or, if they were given the work in advance, to review the work and score it using the rubric. During this process, participants are looking at the student work through the lens of the rubric: what language of the rubric best describes the student work? At the same time, participants can note parts of the student work that they see as representative of the rubric language. When finished reading, participants should score the paper on their own (without discussion with other participants).

4. **Discussion and Consensus:** Scores are collected from all raters, and the group looks for patterns, where scores align and where they differ. Participants should be prepared to talk about their rating and why they see the rating as appropriate. They should also be prepared to listen to colleagues' perspectives and be open to those perspectives. Participants talk about how/if they rated the same or different and why. Participants should talk through all questions and concerns. The goal of this conversation is that raters share their perspective in order to come to an understanding so that they can rate student work with a level of consistency among them. During this conversation, it is important to remember that the participants are deciding how they will assess the student work as a group. If individuals don't agree on a rating, they should attempt to meet a middle ground where all participants are confident they can rate in the same way – if they can interpret and apply the rubric descriptions similarly -- even if they would grade differently in their own classes. (See *More about Coming to Consensus* below)

5. **Repeat as Needed**: Ideally, this process is repeated two or three times with a range of samples, so that participants can clearly see how, when and why student work is rated. Allowing participants the chance to rate a low, medium and high paper can give them experience in how to rate specific examples.

More about Coming to Consensus

The goal of the norming session is for participants to rate in a consistent manner for the same or similar reasons. If, after the process, raters are within one point on a six-point scale, the group can be considered normed. For example, if a rubric is on a six-point scale, and all of the participants align, after discussion, that a student paper is either a 3 or a 4, a facilitator can usually consider the group normed.

Rating and Next Steps

Soon after a norming session, raters generally score additional student work to generate data for program assessment. (The norming session itself calibrates the raters but does not generate assessment data.) For example, after the norming session, raters can score additional papers over a two-week period, without needing to meet again. Anchor papers with scores can be made available electronically for raters to refer to.

Programs are welcome to contact ATL for information on collecting student work (including decisions about sample size and representation), preparing student work for rating, collecting scores from raters, using multiple reads to calculate reliability, and data analysis and presentation for subsequent faculty discussion.

Examples

Program A
Program A has a capstone course with final papers that cover many of the student learning outcomes. The program has randomly pulled a representative sample from the class of seniors to be rated. A group of faculty members have been identified to rate the papers. They assemble at the same time to participate in a norming process.

During norming, several questions arise about the nature of the student learning outcomes and how those are taught in the curriculum. The committee reads a total of four papers, chosen to illustrate a range of levels, coming to consensus on the scoring. Afterwards, committee members each read an assigned number of collected papers and submit their scores for further analysis and results. Two papers are scored by all raters, to monitor reliability.

Program B
In Program B, most of the faculty members have been requested to participate. With such a large group, finding a single time to bring all faculty members together to rate has been difficult.

In order to facilitate the process, faculty members have agreed to the following process: Several norming sessions have been established. The first one is of a representative subgroup of faculty members who have been tasked with creating anchor documents. The documents are then taken to the rest of the norming sessions to norm faculty to the scores of the students' work. This process allows the faculty members to have several, smaller norming session and to assure that the faculty are all normed to the same scores for the same papers.

Based on Good Practice Resources

Calibration Protocol for Scoring Student Work, Rhode Island Department of Education

Scoring Rubric Group Orientation and Calibration, University of Hawaii Manoa

APPENDIX F

Writing Rubrics

Association of American Colleges and Universities
Value Rubric for Written Communication

Hampshire College (Teagle Foundation Grant)
Senior Thesis Rubric To Improve Teaching and Learning

University of Rhode Island
Write Effectively General Education Rubric

WRITTEN COMMUNICATION VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Framing Language

This writing rubric is designed for use in a wide variety of educational institutions. The most clear finding to emerge from decades of research on writing assessment is that the best writing assessments are locally determined and sensitive to local context and mission. Users of this rubric should, in the end, consider making adaptations and additions that clearly link the language of the rubric to individual campus contexts.

This rubric focuses assessment on how specific written work samples or collectios of work respond to specific contexts. The central question guiding the rubric is "How well does writing respond to the needs of audience(s) for the work?" In focusing on this question the rubric does not attend to other aspects of writing that are equally important: issues of writing process, writing strategies, writers' fluency with different modes of textual production or publication, or writer's growing engagement with writing and disciplinarity through the process of writing.

Evaluators using this rubric must have information about the assignments or purposes for writing guiding writers' work. Also recommended is including reflective work samples of collections of work that address such questions as: What decisions did the writer make about audience, purpose, and genre as s/he compiled the work in the portfolio? How are those choices evident in the writing -- in the content, organization and structure, reasoning, evidence, mechanical and surface conventions, and citational systems used in the writing? This will enable evaluators to have a clear sense of how writers understand the assignments and take it into consideration as they evaluate

The first section of this rubric addresses the context and purpose for writing. A work sample or collections of work can convey the context and purpose for the writing tasks it showcases by including the writing assignments associated with work samples. But writers may also convey the context and purpose for their writing within the texts. It is important for faculty and institutions to include directions for students about how they should represent their writing contexts and purposes.

Faculty interested in the research on writing assessment that has guided our work here can consult the National Council of Teachers of English/Council of Writing Program Administrators' White Paper on Writing Assessment (2008; www.wpacouncil.org/whitepaper) and the Conference on College Composition and Communication's Writing Assessment: A Position Statement (2008; www.ncte.org/cccc/resources/positions/123784.htm)

Glossary
The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Content Development: The ways in which the text explores and represents its topic in relation to its audience and purpose.
- Context of and purpose for writing: The context of writing is the situation surrounding a text: who is reading it? who is writing it? Under what circumstances will the text be shared or circulated? What social or political factors might affect how the text is composed or interpreted? The purpose for writing is the writer's intended effect on an audience. Writers might want to persuade or inform; they might want to report or summarize information; they might want to work through complexity or confusion; they might want to argue with other writers, or connect with other writers; they might want to convey urgency or amuse; they might write for themselves or for an assignment or to remember.
- Disciplinary conventions: Formal and informal rules that constitute what is seen generally as appropriate within different academic fields, e.g. introductory strategies, use of passive voice or first person point of view, expectations for thesis or hypothesis, expectations for kinds of evidence and support that are appropriate to the task at hand, use of primary and secondary sources to provide evidence and support arguments and to document critical perspectives on the topic. Writers will incorporate sources according to disciplinary and genre conventions, according to the writer's purpose for the text. Through increasingly sophisticated use of sources, writers develop an ability to differentiate between their own ideas and the ideas of others, credit and build upon work already accomplished in the field or issue they are addressing, and provide meaningful examples to readers.
- Evidence: Source material that is used to extend, in purposeful ways, writers' ideas in a text.
- Genre conventions: Formal and informal rules for particular kinds of texts and/or media that guide formatting, organization, and stylistic choices, e.g. lab reports, academic papers, poetry, webpages, or personal essays.
- Sources: Texts (written, oral, behavioral, visual, or other) that writers draw on as they work for a variety of purposes -- to extend, argue with, develop, define, or shape their ideas, for example.

WRITTEN COMMUNICATION VALUE RUBRIC

AAC&U Association of American Colleges and Universities

Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Context of and Purpose for Writing *Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).*	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Genre and Disciplinary Conventions *Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).*	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.
Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.

Teagle Grant: Assessing the Senior Thesis to Improve Teaching and Learning

Senior Thesis Rubric, Hampshire College

	Level 1	Level 2	Level 3	Level 4
Rationale/ Motivation	no clear rationale or a weak rationale for the project	some rationale presented, begins to motivate the work	provides and discusses a suitable rationale	persuasive and creative rationale
Scope/Dealing with Complexity in Framing a Topic	frames complex questions as simple ones	invests question with some complexity, may over-simplify or over-extend	reasonable balance between focus and complexity	frames the topic with a full appreciation of its complexity while retaining appropriate focus
Approach/ Methodology/ Context	not clear what was done or why, or an inappropriate method	approach is generally appropriate and properly executed	clearly described and justified, well-chosen and appropriate, and well-executed	creative and sophisticated methods
Scholarly Context	author does not demonstrate awareness of the scholarly literature, may over-rely on too few sources	author demonstrates a reasonable awareness of the literature	author demonstrates broad awareness and situates own work within the literature	author does these things and makes a contribution to the field, or identifies a new direction for investigation
Position	does not take a clear or defensible position or draw a clear conclusion	states and/or critiques a position that may already be in the literature	thoroughly and effectively supports, tests, extends, or critiques a position that may already be in the literature	develops a clear and defensible position of his/her own, draws a significant conclusion
Argument	weak, invalid, or no argument, perhaps a simple assertion	some arguments valid and well supported, some not	main arguments valid, systematic, and well supported	arguments both well supported and genuinely compared to conflicting explanations
Use of Data/Evidence	draws on little or no evidence, mostly relies on assertions or opinions, or evidence not clearly presented	some appropriate use of evidence but uneven	feasible evidence appropriately selected and not over-interpreted	fully exploits the richness of the data/evidence/ideas, and is sufficiently persuasive
Insight, Seeing Patterns and Connections	treats related ideas or data as unrelated, or draws weak or simplistic connections	begins to establish connections and perceive implications of the material	brings together related data or ideas in productive ways, thoroughly discusses implications of material	develops insightful connections and patterns that require intellectual creativity
Writing Mechanics				
grammar and spelling, usage	significantly impairs readability	frequent or serious errors	some minor errors	virtually no errors
organization	needs significant reorganization	structure is of inconsistent quality, may have choppy transitions and/or redundancies or disconnections	structure supports the argument, clearly ordered sections fit together well	structure enhances the argument, strong sections and seamless flow
clarity, style, readability (as appropriate to genre and discipline)	gets in the way of reading for content	beginning to be comfortable with appropriate conventions, style is inconsistent or uneven	effective prose style, follows relevant scholarly conventions, emergence of voice	mastery of the genre, including elegant style, established voice

Write Effectively General Education Rubric

Graduates successfully completing an undergraduate program should demonstrate competence in written and oral communication in English (NEASC Standards for Accreditation rev. 2011 4.19). The academic level of an approved course will not affect the required standard of competence. In other words, 100 and 300 level courses will use the same benchmarks for assessing student writing quality. It is essential that student performance is assessed rigorously across all relevant categories of English writing competence. Students for whom written English poses unusual difficulties may need to work towards achieving a university-appropriate level of written communications proficiency over multiple courses in their academic careers.

Framing Language
The **writing competency** rubric is intended to provide criteria by which written communications may be assessed as a learning outcome, both in individual assignments and in the course overall. Note that for the purposes of developing writers who are able to communicate effectively and appropriately in a typical professional workplace and the public sphere, the competency is defined with specific parameters (see **Definition**). Demonstrating creative or discipline-specific writing competency only fulfills the general education written communications learning outcome insofar as the skills demonstrated translate readily and clearly into other forms of public, professional, and academic writing. Accordingly, writing instruction must focus on mastery of, and adherence to, the recognized rules of **standard written English**.

Learning Outcome: "Write effective and precise texts that fulfill their communicative purposes and address multiple audiences"
Definition
Written communication is the development and expression of ideas in writing. Writers communicate through a variety of styles and genres, to create, entertain, inform, analyze, argue, interpret, and explain. At the university-level, competency in written communications requires a mastery of the formal English writing skills appropriate to a professional workplace, public communication, or an academic environment.

Only courses that **teach and assess writing in English** as a substantial part of overall class time and assessment may satisfy the written communications learning outcome.

What must a Written Communication Course require of students to achieve the Learning Outcome?
The written communication skills of a university graduate should prepare them for life in educated society and the professional world. Competency in written communications includes the ability to produce sophisticated and substantial written texts that are appropriate for the audience, context, and the goals of the writer. '**Substantial**' is defined as a lengthy written assignment or equivalent series of smaller assignments in which there are ample opportunities for a student to learn from and respond to regular detailed individual feedback on his or her writing. The appropriate page and word length of student assignments will vary by discipline, and will be acceptable so long as the instructor can demonstrate that the course will provide adequate opportunity for the student to develop and demonstrate competence in English written communication. The quality of the student's writing must also be established as one of the primary categories by which the assignment and the overall course grade will be assessed. Remedial or high school level coursework may not be used to assess this competency. Nor will stand-alone projects without feedback or opportunities for revision be acceptable, unless a series of similar assignments is required. Courses satisfying the outcome will approach writing as a process by which the elements of effective written communication are developed through systematic critical feedback and revision. The development of effective written communication must be a primary focus of most if not all of the required coursework. '**Sophisticated**' is defined as the demonstration, in writing, of the ability to articulate concepts, explanations, and arguments that establish the student's understanding of the writing task and the subject material of the course or assignment.

Write Effectively General Education Rubric

Full Coverage: must **teach and assess** all of the elements in a **substantial written assignment** or **series of shorter assignments** in standard written English.

Partial Coverage: must **teach and assess** all of the elements but in **a less substantial written assignment** or **series of shorter assignments** in any language.

Elements	Competent	Approaching Competency	Beginning Competency
Sophistication and Substantial Content: Demonstrates mastery of the skills required for lengthy and complex writing tasks. Word or page limits must be used effectively.	All required assignments are completed, and effective use is made of the assigned word or page length(s) to produce a sophisticated written text or series of texts.	All required assignments are completed at the correct length, but there are shortcomings in the sophistication of the writing and/or less effective use of the limits.	Not all the required assignments are completed at the correct word and page length, and/or the writing lacks sophistication, and/or the limits are not used effectively.
Syntax, Grammar, and Structure: Adheres to formal and informal rules of syntax, grammar, mechanics, spelling, punctuation, paragraph structure and vocabulary usage relevant to the writing situation. Fulfills expectations for macro and micro level coherence and logic.	Demonstrates mastery of the rules of standard written English, and the effective construction of sentences and paragraphs. Writing requires minimal editorial correction. Overall structure is clear, logical, and appropriate for the writing task.	Demonstrates a developing command of standard written English. Written work requires substantial editorial correction. Structural organization of the writing may be weak, and under-mined by lack of clarity or logic.	Does not demonstrate a command of standard written English, lacking sentence-level fluency. Poor structure and logic undermine and confuse the writer's message or purpose.
Context, Conventions, and Purpose: May include considerations of style, audience, genre, aims, citation rules, and other circumstances relevant to the discipline or writing situation.	Demonstrates full understanding of the writing situation and relevant conventions, intended audience, and purpose, and fulfills the writing task effectively.	Demonstrates awareness of the writing situation, audience, and purpose, and adequately fulfills the writing task. Demonstrates use of disciplinary conventions.	Demonstrates poor understanding of the writing situation, audience, and purpose; does not yet focus effectively on the writing task or the appropriate conventions.
Process Engagement: Participation in a systematic process of critical feedback and improvement to produce higher quality work	Demonstrates full and productive engagement in the process of invention, research, drafting, feed-back, development, and revisions.	Demonstrates engagement in the revision and/or repetition of writing assignments with feedback to produce higher quality work.	Does not yet participate effectively in a collaborative process of feedback and development.
Content: May include research, synthesizing, analyzing, critiquing, explaining, arguing, or exploring. The final writing product demonstrates understanding of the subject, discipline, and writing task.	Demonstrates competence in the subject and discipline and the ability to articulate knowledge and communicate effectively through writing, achieving the writing task.	Demonstrates satisfactory command of the subject and awareness of how knowledge operates and is articulated within the discipline.	Does not yet demonstrate adequate command of the subject or discipline. Writing ability may be insufficient to communicate effectively about or within the discipline.

APPENDIX G

University of Montana Department Assessment Plans

Department of Economics
Department of Geography

Department of Economics
Academic Year 2014-15 Assessment Report

MISSION STATEMENT

The mission of the Department of Economics is to teach economics, provide knowledge through research, and serve the local community and society at large. The Economics program seeks to make available to students, the public, and governments, the factual, theoretical, and critical tools in the discipline of economics. The program strives to be critical in the best sense of the word, providing insights and alternative ways of thinking about problems. The department considers its teaching goals to be three-fold: (1) to present to students the basic theoretical tools of economic analysis, relevant facts and institutional material, which will assist them as civic leaders; (2) to introduce students to the various special fields within economics; and, (3) to help meet, through graduate work, the demands for competent professional economists in industry, government and education.

DEPARTMENT OBJECTIVES and ALIGNMENT WITH STRATEGIC ISSUES

1. To help meet, through graduate work, the demands for competent professional economists in industry, government and education. This aligns with the UM's drive for 'Discovery and Creativity to Serve Montana and the World."

2. To offer courses in microeconomics, macroeconomics and to introduce students to the various special fields within economics. To present to students the basic theoretical tools of economic analysis, relevant facts and institutional material, which will assist them as civic leaders. This aligns with the UM's drive for 'Discovery and Creativity to Serve Montana and the World."

3. To ensure that students understand that economic issues fit into important global contexts. This aligns with the UM's emphasis on "Education for the Global Century."

STUDENT LEARNING GOALS AND MEASUREMENT TOOLS

Goals	Measurement Tools		
1 Students should articulate the advantages and limitations of government intervention in markets.	Comprehensive exit exam	Performance on required Intermediate Microeconomics and Intermediate Macroeconomics midterm and final exams	
2. Students should demonstrate a good understanding of the workings of markets.	Comprehensive exit exam	Performance on required Intermediate Microeconomics and Intermediate Macroeconomics midterm and final exams	
3. Students should be able to apply appropriate economic models to real world situations.	Comprehensive exit exam	Performance on required Intermediate Microeconomics and Intermediate Macroeconomics midterm and final exams	Senior Thesis Project evaluated with a rubric
4. Students should be able to formulate a basic research agenda	Senior Thesis Project evaluated with a rubric		
5. Students should express themselves in a clear and articulate way both orally and in writing.	Senior Thesis Project evaluated with a rubric	Senior Thesis oral presentation	

RESULTS AND MODIFICATIONS

Students should express themselves in a clear and articulate way both orally and in writing.	We saw many of our students struggle with writing. In many cases, the good ideas they had were not well-expressed. For the last two years, we've had a really successful partnership with the Writing Center. The WC tutors are with our class from early in the first term and meet weekly with our seniors. There has been a dramatic uptick in the clarity and sophistication of student writing. If the WC continues to have the resources, we will continue this partnership.

APPENDICES

1. Appendix 1: Senior Thesis Overview

2. Appendix 2: Economics Writing Rubric

3. Appendix 3: Senior Thesis Presentation Rubric

4. Appendix 4: Senior Thesis Grading Criteria

FUTURE PLANS FOR CONTINUED ASSESSMENT

Nearly all of our assessment efforts have been implemented in the last 10 years. At the moment, we are quite satisfied with the information we get out of the process. Based on both internal discussions and suggestions that came out of our recent 10-year program review we are considering a few new options. First, we are going to work on changing our student evaluation survey to better fit our student outcome priorities. We have a faculty committee seeking out some new best-practice models, both on campus and at other institutions. Second, our outside reviewer suggested some programmatic changes – particularly with respect to our required senior thesis – that would allow a project-based economics major. While the project would allow assessment in some of the same ways as the thesis, it's more direct policy and community service aspects would allow us another dimension of student assessment. These discussions are ongoing.

APPENDIX 1: The Senior Thesis in Economics

<u>Senior Thesis Overview</u>

Every senior economics major is required to submit a senior thesis. The senior thesis is an opportunity for students to demonstrate, apply, and refine the competencies they have developed over the course of their college education. The senior thesis is an integrative project that allows students to work with a faculty member to:
- identify an interesting economic problem and
- perform an appropriate economic analysis of the problem.

The senior thesis may be on any subject the student chooses provided it contains significant economic content. The senior thesis does not need to advance economic thought or find significant results in order to be successful. Rather, the goal of the senior thesis is for the student to demonstrate the competencies and tools involved in the thinking, researching, analyzing, and composing processes. Although this senior thesis may sound daunting, students find the process educational, rewarding and even enjoyable. What students learn from the process is almost entirely determined by what they put into it.

<u>Senior Thesis Competencies</u>

The senior thesis requires the integration of several types of knowledge and competencies. It allows students to demonstrate the wide range of competencies expected of economic majors and requires students to create a product they can share with potential employers or graduate schools.

The senior thesis should demonstrate that students have developed the following key competencies, including the ability to:
- explain clearly the problem being addressed;
- apply appropriate economic logic to the economic problem at hand;
- organize logically ideas both within each section of the document and in the structure of the document itself;
- write a grammatically and mechanically correct document using the conventions of economists;
- explain the institutional and historical context in which the particular problem needs to be understood;
- apply the appropriate basic economic theory to the problem;
- make appropriate use of data relevant to analyzing the problem at hand and apply the appropriate quantitative tools to the economic problem;
- summarize the relevant existing literature;
- determine the public policy implications of the results.

While we recognize that not every economic problem may require each of these competencies to be addressed in detail, students should seek to demonstrate those that are relevant to their senior-thesis projects. For instance, a methodological or philosophic thesis may not engage in empirical analysis. However, such a thesis would be expected to discuss the types of data or other considerations that would be relevant to judging the reliability of the thesis' results or conclusions. An empirical thesis might not emphasize methodological or philosophic issues but would be

expected to explain the basic economic theory or model that supports the empirical analysis. Most theses will allow some demonstration of competency in almost all of the areas listed above. The rubric below describes the competencies more fully.

Senior Thesis Support and Resources

Course Support
In order to help senior majors successfully complete the senior thesis, the Department of Economics offers two required courses.

ECNS 488: Research Methods and Thesis Design is offered in the fall. This course helps students to develop a senior thesis proposal and start on the senior thesis. This course helps students improve their economic competencies and coordinates the development of a senior thesis proposal which will act as the foundation of the senior thesis.

ECNS 499: Senior Thesis is offered spring semester and provides support to students writing their senior thesis. The course helps set mile posts for the thesis project and gives each student a venue in which to present their completed project. Although the student will work primarily with the faculty thesis advisor to complete the senior thesis paper of at least 20 pages, the class will provide valuable project support.

Faculty Supervisor
Early in the fall each student will be assigned to a faculty advisor. Over the course of the academic year, the student will work closely with the faculty advisor to complete the senior thesis. The faculty advisor will be responsible for giving the student feedback on the project, and the student will be responsible for incorporating that feedback.

The Writing Center
The Department of Economics is pleased to work closely with the Writing Center tutors who can provide valuable additional feedback throughout the thesis project. Indeed, it is important that the student take advantage of opportunities for feedback from the faculty supervisor and the Writing Center tutors. All writers need feedback early and throughout a writing process, and many of us have very limited experience writing longer than 3-5 pages.

APPENDIX 2: Economics Writing Rubric

Learning outcome: Students will be able to clearly explain their economic question, why their thesis is important, and summarize their results.
Work product: Senior Thesis Executive Summary

Learning Outcome Component	4	3	2	1
Writing Skills	Errors in mechanics or grammar are absent or insignificant	Minor errors which do not detract from readability	Errors somewhat hinder readability and/or understanding	Significant errors which cause distraction and/or misunderstanding
Question Development	Clearly explains the problem or question being explored in the thesis	Explains the problem or question being explored but is not clear	Provides some idea of the problem or question but does not explain it and is not clear	Does not explain the problem or question being explored in the thesis
Question Relevance	Thoroughly analyzes and synthesizes the importance of the research question	Discusses the importance of the research question, but is somewhat unclear	Provides little discussion of importance of the research question and/or is unclear	Does not discuss the importance of the research question
Results and Logic	Provides a clear and accurate summary of the thesis results and the logic used to derive the results as they relate to the thesis question	Provides a somewhat clear and accurate summary of the thesis results and the logic used to derive the results as they relate to the thesis question	Provides a summary of the thesis results, but fails to clearly or accurately explain the logic used to derive the results.	Does not provide a summary of the thesis results
Organization	Ideas are sequenced logically & connect fluently with a developed question, discussion of relevance, and results of the thesis	Sequence of question, discussion of relevance, and results flow together reasonably well	Fairly easy to follow with some lapses in understanding of the question, relevance of the question or the importance of results	Economic question, relevance, and results are not presented logically or clearly

APPENDIX 3: Senior Thesis Presentation Rubric

Name:					
Area	Points	Evaluation Scale	Poor/Fair	Good	Excellent
Delivery	/5	Articulate	0	1	2
		Professional	0		1
		Relaxed	0		1
		Question responses	0		1
Use of Power Point	/4	Good use of visuals	0		1
		Slides not cluttered	0		1
		Good content on slides	0		1
		Power Point used effectively	0		1
Content	/11	Clear explanation of the research question	0	1	2
		Literature review adds to understanding	0		1
		Appropriate inclusion of institutional or historical context	0		1
		Clear explanation of methods	0		1
		Clear explanation of data	0		1
		Clear conclusions	0	1	2
		Acknowledgment of problems	0		1
		Economic logic is clear	0	1	2
Total	/20				

Comments:

APPENDIX 4: Senior Thesis Grading criteria

The senior thesis will be graded by the student's faculty advisor and the instructor of record for ECNS 499. Plagiarism will not be tolerated, and those who plagiarize will get a failing grade.

Grading criteria for the senior thesis include the demonstration of the relevant competencies outlined above; however, many of the competencies cannot be evaluated unless the paper is well organized and grammatically and mechanically correct. Evaluators may determine that some competencies are not applicable.

Competency	Excellent	Fair	Poor
Clear Explanation of the Problem	The problem is clearly explained in the beginning and remains consistent throughout.	The problem is clearly explained, but analysis appears to drift from the problem at hand.	No single clear problem stands out.
Appropriate Economic Logic	Correct and clear economic logic is applied.	Economic logic is applied but it is not clear or is not the appropriate logic to apply.	Economic logic is missing.
Organization	The organization of the thesis sections and of the ideas within each section leads to an easy understanding of the paper's logic.	The organization of the thesis sections or of the ideas within each section does not enhance the paper's logic.	The organization of the thesis sections or of the ideas within each section detracts significantly from the paper's logic.
Grammar and mechanics	The paper uses correct grammar and mechanics throughout.	Grammatical or mechanical errors are limited and do not interfere with understanding.	Grammatical or mechanical errors significantly impede understanding.
Institutional Setting and Historical Context	Clear explanation purposefully integrated into the paper.	Clear explanation but not purposefully integrated into the paper.	Missing.
Economic Theory	Appropriate economic theory is applied.	Economic theory is applied but it is not clear or is not the correct theory to apply.	Economic theory is missing.
Use of data and quantitative analysis	Appropriate data and quantitative analysis are used to offer support for the paper's analysis.	Appropriate data is used but the quantitative analysis does not integrate into the logic of the analysis.	Inappropriate data is used or the quantitative analysis addresses a different issue, hence the quantitative analysis does not support the logic of the paper.
Literature Review	Extensive and helpful.	Extensive but not helpful.	Limited.
Public Policy	Clear and logically connected to the research presented.	Logical but not clearly presented.	Inappropriate given the research presented.

Geography Department Assessment Report
Fall 2014

MISSION STATEMENT
Consistent with the mission statement of The University of Montana, the Department of Geography actively contributes to the liberal education of its students, providing curricula at both the undergraduate and graduate levels that are diverse, well-balanced, and representative of the discipline of geography. The department also plays a vital role in the university by examining and synthesizing concepts, beliefs, and facts intrinsic to the natural sciences, arts, humanities, and social sciences. The Geography Faculty is emphatic in its belief that all proposed initiatives must be compatible with the traditional liberal-arts orientation that has been the hallmark of the department. The Department of Geography assists students in developing an awareness and understanding of important environmental, cultural, and socio-economic issues of relevance to the State of Montana, the nation, and the international community. This is accomplished through instruction at both the undergraduate and graduate levels; through our commitment to research; through our allocation of departmental resources; and through mutually beneficial relationships with professional societies, governmental agencies, non-governmental organizations, and the private sector.

DEPARTMENT OBJECTIVES
1. Graduating majors are expected to have a well-rounded understanding of geography, as well as practical insight into each of the major subdivisions of the discipline.
2. It is our goal that they be rigorously trained through the completion of course work and assigned projects, through direct field observation and supervised research, and through active participation in the intellectual life of the university and the community.
3. Our program prepares our students to address a broad range of complex environmental, cultural, and socio-economic issues, on multiple scales, through theoretical and empirical enquiry, higher-order thinking, and the application of appropriate forms of geographical analysis (including historical, spatial, qualitative, quantitative, and mixed-method analysis).
4. It is expected that students graduating with a baccalaureate degree will have acquired the knowledge and skills required for advanced academic study, voluntary domestic or overseas service, or employment in areas of technical emphasis.
5. It is expected that students earning a graduate degree will be amply qualified for professional employment in governmental agencies or the private sector, as well as for continued graduate-level studies in their areas of interest.

STUDENT LEARNING GOALS AND MEASUREMENT TOOLS *					
*The following elements pertain only to our graduated undergraduates. Assessment of our graduated graduate students is based on the caliber of the completed theses, professional papers, or comprehensive exams and defense of a significant professional work (i.e., report or portfolio), as well as job placement. All measurement tools will be implemented beginning in the 2014-2015 academic year. **Undergraduate Assessment Rubric** **1. The student demonstrates <u>mastery</u> of the learning goal.** **2. The student <u>satisfies</u> the learning goal.** **3. The student <u>does not satisfy</u> the learning goal.**	**Student Portfolio**				
	Term Papers (from required systematic courses and upper-division writing course)	**Written Evaluations (when available from internship supervisors, etc.)**	**Lab Exercises from required courses (GPHY 112, 284, 385)**	**Map(s) from a required course (GPHY 284) and from other GIS courses)**	**Presentation (upper division courses)**
1. Understand micro- and macro-scale spatial relationships within and between the systems of the physical and human environments; a. B.A. students will demonstrate special competency in such understanding as applied to the cultural, economic, political, population, and/or urban dimensions of the human environment and/or geospatial techniques. b. B.S. students will demonstrate special competency in such understanding as applied to the physical environment and/or geospatial techniques.	**2013 (see below)**	**2015**	**2015**	**2015**	**2015**
2. Understand the theoretical and practical underpinnings of the discipline of geography and its systematic branches (with B.A. and B.S. students demonstrating special competencies in their respective branches).	**2013 (see below)**	**2015**	**2015**	**2015**	**2015**

STUDENT LEARNING GOALS AND MEASUREMENT TOOLS *					
3. Be able to engage in basic analysis and research procedures involving the use of spatial or other forms of data.	**2013 (see below)**	**2015**	**2015**	**2015**	**2015**
4. Have the ability to acquire and use spatial and other data within the context of field, laboratory, teaching, and internship experiences; a. B.A. students will demonstrate special competency using geospatial data describing human systems. b. B.S. students will demonstrate special competency using geospatial data describing the physical environment.	**2015**	**2015**	**2015**	**2015**	**2015**
5. Have the computer, computational, and communication skills required of new professionals	**2015**	**2015**	**2015**	**2015**	**2015**

Note: These learning goals have been adapted from the *National Geography Standards* of 1994, updated in 2012 (available: National Geography Standards Index), which include eighteen different standards organized into six different elements and which were specifically targeted to secondary education. The department's expectations for these goals are appropriately scaled for students in the university setting.

RESULTS AND MODIFICATIONS	
Assessment of Upper Division Writing Courses to assist with University-wide effort to assess General Education Group One requirements	In late Summer and early Fall of 2013, archived papers from students completing the Department's two Upper Division writing courses (GPHY 335 Water Policy and GPHY 433 Cultural Ecology) in 2011-2012 and 2012-2013 (a total of 43 papers from four separate courses) were assessed using more general assessment criteria than shown above (see the attached rubric and summarized results). This assessment was intended to assist the University in its program assessment of the undergraduate writing requirements under Group One of the General Education Requirements (phase 3). The results of the assessment indicate that, on average, students show average to proficient abilities in each of the areas assessed (30 of 43 students). Eight students were judged to have strong abilities, as demonstrated, and four were judged to be deficient. No trends relative to the particular course or year were evident, indicating that some randomness in student abilities might be attributed to certain factors likely influenced the overall results. Such factors might include: 1) more or less preparation on the part of students via the UM writing program (some students may have entered UM when the program was not configured to require separate Approved Writing Courses and Upper Division Writing Courses, 2) a large segment of students majoring in Geography at UM have transferred into UM from other schools and may have had early writing instruction elsewhere, and may even be exempt from completing the Approved Writing Course requirement at UM by virtue of transferring with 27 or more semester credits. We recommend changing this exemption policy to require an Approved

RESULTS AND MODIFICATIONS

Writing Course for any student who transfers to UM with less than 60 semester credits. Additionally, greater emphasis will be placed on ensuring that Geography instructors and graduate teaching assistants provide consistent instructions to students who are preparing essays and research papers in our two writing courses. Pre-assignment review of evaluation rubrics by instructors, TAs, and students will assist with this.

APPENDICES (attached)

1. Geography Writing Assessment Rubric and summarized results.
2. Geography undergraduate degree programs curriculum map.

PLANS FOR FUTURE ASSESSMENT

In Fall 2013, the Department of Geography submitted (to ASCRC) an Undergraduate Senior Capstone course (GPHY 400) for review and approval. This capstone is now a program requirement for any student majoring in Geography who will graduate under the 2014-15 UM Catalog requirements, and will require the preparation and submission of a digital portfolio that can later be used for assessment purposes. This course has been approved and we will implement this requirement for graduating seniors beginning in the Fall of 2014. We plan to conduct our first formal assessment of student learning goals in the Summer Semester of the 2014-2015 academic year using the first portfolios we receive from graduating seniors (we should have six or seven of these to review at that time based on current registration in the capstone, and a past student's completion of a portfolio in Fall 2013 as a pilot experience).

In addition to updating the information corresponding to the Student Learning Goals and Measurement Tools shown in the table above, we have also developed a curriculum map (attached) to assist with our future assessment activities.

APPENDIX 1: Geography Writing Assessment Rubric and summarized results.

CRITERIA	4-strong	3-proficient	2-average	1-deficient
CONTENT AND ANALYSIS: Paper includes pertinent information on the topic with compelling evidence and examples to support argument; the question or problem being addressed is identified; desired points are conveyed logically and in an interesting manner; an understanding of the complexities of the topic is demonstrated; shows evidence of analytical rigor and accurate interpretation of data and information.		**Avg=3.03 (n=43)**		
ORGANIZATION OF IDEAS: Paper is coherent and engaging, with organizational strategies that effectively and purposefully guide the reader; includes a strong opening and closing; smooth transitions reflect the writer's logic and demonstrate how ideas connect.			**Avg=2.86 (n=43)**	
PROSE: The paper is written using clear and well-crafted sentences and precise word choices; the prose is controlled, graceful and read with ease; language choices and tone are effective for the purpose and audience.		**Avg=3.05 (n=43)**		
INTEGRATION OF RESOURCES: Paper demonstrates effective and relevant use of a variety of data sources; sources are assessed for reliability, validity, accuracy, and timeliness and appropriately incorporated; supplemental material such as figures, graphs, and tables are useful; in-text citations and bibliographic entries are accurate and follow standard citation formatting guidelines as specified.			**Avg=2.68 (n=43)**	
CONVENTIONS: Paper demonstrates a command of grammar, usage, spelling, and punctuation with little or no errors; mechanics of the paper support its readability rather than impeding the reader's understanding; reflects a professional effort.			**Avg=2.89 (n=43)**	
Overall Results: Avg=2.90 (n=43) **Course 1 Results: Avg=2.88 (n=13)** **Course 2 Results: Avg=3.16 (n=9)** **Course 3 Results: Avg=3.04 (n=14)** **Course 4 Results: Avg=2.54 (n=7)**	**8 papers w/ Avg=4**	**12 papers w/ $4<Avg \leq 3$**	**18 papers w/ $3<Avg \leq 2$**	**4 papers w/ $2<Avg \leq 1$**

Appendix 2. Geography Undergraduate Programs Curriculum Map.

CURRICULUM MAP				
Learning Outcome/Course	100 Level	200 Level	300 Level	400 Level
1. Understand micro- and macro-scale spatial relationships within and between the systems of the physical and human environments; a. B.A. students will demonstrate special competency in such understanding as applied to the cultural, economic, political, population, and/or urban dimensions of the **human** environment and or geospatial techniques. b. B.S. students will demonstrate special competency in such understanding as applied to the **physical** environment and/or geospatial techniques.	111*(K) 112*(K) 121*(K) 141*(K)	241(K) 243(K) 245(K)	Human 323(A) Both 335$^+$(A) 338(A) 344(K) Physical 303(A) 311(A) 314(A) 317(A)	400(S) 421(S) 423(AS) 432(S) 433$^+$(S) 465(S) 466(AS) 468(AS) 486(AS)
2. Understand the theoretical and practical underpinnings of the discipline of geography and its systematic branches (with B.A. and B.S. students demonstrating special competencies in their respective branches).	111*(K) 121*(K)		303(K) 311(K) 317(K)	400(S) Emphasized in all.
3. Be able to engage in basic analysis and research procedures involving the use of spatial or other forms of data.	111*(A) 112*(A) 121*(A)	284*(A)	303(A) 335$^+$(A) 385*(A)	423(A) 432(A) 433$^+$(A) 465(A) 466(A) 468(A) 486(A) 487(A) 488(A)

CURRICULUM MAP				
Learning Outcome/Course	100 Level	200 Level	300 Level	400 Level
4. Have the ability to acquire and use spatial and other data within the context of field, laboratory, teaching, and internship experiences; a. B.A. students will demonstrate special competency using geospatial data describing human systems. b. B.S. students will demonstrate special competency using geospatial data describing the physical environment.	112*(A)	284*(A)	303(A) 385*(A)	466(A) 468(A) 486(A) 487(A) 488(A)
5. Have the computer, computational, and communication skills required of new professionals	112*(A)	284*(KA)	317(A) 323(A) 335(A)	466(A) 468(A) 486(A) 487(A) 488(A)

Notes:
- o Refer to the 2014-15 UM Catalog for course titles and descriptions. Courses listed are those that are regularly taught.
- o **K** denotes **Knowledge** demonstrated in course.
- o **A** denotes **Application** demonstrated in course.
- o **S** denotes **Synthesis** demonstrated in course.
- o * denotes a required course.
- o + denotes an upper-division writing course.
- o 303 is ERTH 303
- o For upper-division courses, **K**nowledge is assumed in order for **A**pplication and/or **S**ynthesis to be demonstrated.

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