
REPORT OF THE WASHBURN UNIVERSITY GENERAL EDUCATION TASK FORCE

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NOVEMBER 16, 2009

CHAIRPERSON'S INTRODUCTION

In August 2008, Washburn University Vice President for Academic Affairs Dr. Robin Bowen commissioned a Task Force to investigate and report on General Education at Washburn. The Task Force was charged with submitting a set of proposals regarding a variety of issues. Among these were Washburn University's current General Education skills, required areas of learning and University Requirement courses; the transfer of General Education credit hours earned at other institutions of higher learning; and assessment of learning in General Education courses.

This report presents an integrated set of recommendations describing one possible General Education program for Washburn University that addresses all of the issues the Task Force was asked to review. As the Task Force Chairperson, I would like to share a few perspectives to help readers appreciate the context in which this report was prepared.

The Task Force process began by identifying principles that would guide our processes and decision-making. Foremost among these was approaching each issue from a “what’s best for students?” point of view. Inclusivity of colleagues’ opinions was also key (thus our use of surveys, workshops and wikis), as was an emphasis on making recommendations that would result in the smallest possible changes to existing policies, which minimizes the need for new resources. We also recognized that considerable creativity exists at the department level, and thus, whenever possible, we preferred empowering these units to make more detailed decisions regarding the appropriate General Education requirements for their programs and majors, as this is where the knowledge of “what’s best for students?” resides. Additionally, empowering the units to make discipline-specific decisions is the most efficient way to maintain academic rigor. The Task Force was careful to avoid making proposals that would hamper units' ability to create the type of learning environment they deem optimal for their disciplines.

Throughout our process, the Task Force members remained aware that we were an advisory body, and that our Report would eventually work its way through the regular University channels, starting with the VPAA, then on to the Academic Affairs committee and Faculty Senate, and ultimately the full University faculty. We also realized that, as it traveled through these channels, our Report would be closely scrutinized and discussed, with many of our proposals likely to be refined by various Washburn constituents. The Task Force therefore crafted its recommendations not just as standalone proposals, but paid particular attention to how the proposals interacted with one another. For that reason, users of this Report are encouraged to offer suggestions for improving our recommendations after considering the Report in full, and paying particular attention to how our proposals, and thus all suggested changes and improvements that might be offered, would affect General Education at Washburn in its entirety. We believe that our mutual suggestions have the best chance of advancing General Education at Washburn if everyone participating in the process bears in mind how their proposed changes interact with the full range of issues that must be coordinated into one exemplary program that works well for all University constituents.

Lastly, the proposals that follow are organized in order of those that are closest to being ready for a decision by the full faculty (Section 1), and those that probably require additional campus-wide conversation (Section 2).

— Submitted on behalf of the VPAA's General Education Task Force, November 9, 2009.

REPORT OVERVIEW

This section will provide an overview of the report and define several vocabulary items the reader will find helpful. The Task Force's main set of proposals include a revision of **1.)** Washburn's General Education statement and **2.)** General Education requirements, where student learning requirements are described in two ways: as **a.)** *Learning Outcomes*, which are the common components of General Education the University believes to be critical to all students' success, and **b.)** *Distribution Requirements* — the Liberal Studies courses that provide students with their discipline-specific breadth of knowledge.

It is important to bear in mind that Learning Outcome courses and Distribution Requirement courses are *not* mutually exclusive; rather, students achieve most of their Learning Outcomes (such as proficiency in Communication or Critical and Creative Thinking) within their breadth-of-knowledge Distribution courses. The Learning Outcomes classifications are necessary because these common components of General Education are easy to identify across disciplines, which allows for learning assessment and other accreditation activities to be coordinated as efficiently as possible across the campus.

The part of this overview that the busy reader will probably appreciate the most is an answer to the question "How would these proposals affect my participation in Washburn's General Education curriculum?" An honest answer to that question is, very little. For example, for faculty concerned with whether their courses meet the new guidelines for Learning Outcome and Distribution courses, the Task Force explicitly recommends (in Proposals 2 and 4) that all courses currently approved as General Education courses at Washburn remain valid options for fulfilling both the Learning Outcome *and* Distribution Requirements proposed below. Our recommendation is that faculty teaching General Education courses be required to do four things: **1.)** include the new Learning Outcome relevant to their course in their syllabus; **2.)** clearly indicate which of their course-specific learning objectives will be used to measure that Learning Outcome; **3.)** provide a brief description of their plan for learning assessment; and **4.)** follow up and participate in learning assessment activities as required by the campus. The role of the standing General Education committee in this process would be to assist faculty in preparing their syllabus descriptions and learning assessment plans.

Another way the Task Force's proposals would require only modest changes is that the new Delivery Model preferred by participants in our second survey and workshop is, to a large degree, the model currently used at Washburn. The easiest way to picture the new Delivery Model is to substitute the term "Core Courses" for "University Requirements." That is sufficient to describe the essence of how Washburn's General Education Delivery Model would change, although combined with another recommendation — that students be allowed to use a maximum of one major course to fulfill each Learning Outcome — students would be granted a greater range of choices among Liberal Studies courses. Note, however, that students would still be required to complete the *same number* of Liberal Studies credit hours specified by their degree programs and majors — only their range of choices would change. Faculty have noted that previous General Education programs at Washburn offered students more flexibility in their choice of Liberal Studies courses. The reader will see that the Task Force's proposals, when viewed in their entirety, restore much of that flexibility for students, within a set of integrated recommendations for a General Education program that works for *all* of Washburn's degree programs and majors.

The remainder of the Task Force's recommendations presented below include more detailed descriptions of the new Learning Outcomes and Distribution Model, proposals for learning assessment rubrics that are integrated with the Learning Outcome descriptions, suggested guidelines for the transfer of General Education credit hours earned at other institutions of higher learning, recommendations for re-classifying Washburn's current "University Requirements" into a focused list of required courses that will be referred to as "Core Courses," and a one-page worksheet for Academic Advising that depicts how students can fulfill the new Learning Outcome and Distribution Requirements.

SECTION 1: PROPOSALS CLOSE TO BEING READY FOR A DECISION BY THE FULL FACULTY

The proposals in this section received the most scrutiny by faculty who participated in our surveys, workshops, and wikis. As these have been discussed and refined by a large number of faculty members, they are therefore classified as closest to being ready for a full faculty decision.

PROPOSAL 1: General Education Statement

It is recommended that the current General Education Statement from the 2009-2010 University Catalog (p. 70, shown below):

The primary function of a liberal education is to teach those students who have the capacity and the desire to learn how to learn. Washburn University believes that a good education is the shared responsibility of the primary and secondary schools and the university. The foundation for a liberal education must be developed in the pre-college years. The university must strengthen and build on this foundation. The goals of a liberal education can be divided into two areas — intellectual skills and areas of knowledge.

be replaced with the following:

The General Education component of higher education specifically focuses on introducing students to ways of knowing, integrative knowledge, appreciation of historical context, common themes of human experience, social responsibility, civic engagement, and the development of practical skills and reflective habits of mind. The General Education requirements at Washburn University are designed with the intent of shaping an informed, capable citizenry through a broad education in a range of disciplines. These courses ensure that students are equipped with the knowledge and skills necessary to engage with our rapidly-changing world over their lifetimes.¹

Rationale: Numerous General Education Statements were contributed to a wiki (created during Fall 2009 and available to all faculty for a 3-week period), and all were considered. The Task Force ultimately decided upon a statement that was as content neutral as possible, which means it is inclusive in terms of all Liberal Studies courses that are typically used to satisfy General Education Learning Outcomes and Distribution requirements.

PROPOSAL 2: General Education Learning Outcomes

Based on faculty responses to surveys and interactive Faculty Development workshops, it is recommended that the 9 General Education skills in Washburn University's General Education program be replaced with the following 5 Learning Outcomes:

1. Communication (COM)
2. Quantitative and Scientific Reasoning and Literacy (QSRL)
3. Information Literacy and Technology (ILT)
4. Critical and Creative Thinking (CCT)
5. Global Citizenship and Diversity (GCD)

For the purpose of General Education, a course would be designated as achieving only one primary Learning Outcome, although students may in fact attain mastery in more than one Learning Outcome. It is recommended that students seeking a degree from Washburn University be required to complete some minimum number credit hours (yet to be specified) in each of the five Learning Outcome categories. It is further recommended that all courses currently approved as General Education courses

¹ First sentence adapted from *General Education in the 21st Century*, Center for Studies in Higher Education, University of California at Berkeley [2007], <http://cshe.berkeley.edu/publications/docs/GEC-WEB.FINAL.pdf>.

at Washburn University remain valid options for satisfying the General Education Learning Outcome requirements.

PROPOSAL 3: Learning Outcome Descriptions

Based on input gathered via surveys, Faculty Development workshops and faculty contributions to a wiki, it is recommended that the following 5 new Learning Outcome descriptions be adopted. (Please be aware that the descriptions have been written to correspond with concrete, assessable skills. Examples of learning assessment rubrics relating the descriptions below to assessable skill levels are provided as Appendix 2. For efficient learning assessment across the campus, the Learning Outcomes descriptions presented in this proposal must be coordinated with the Learning Outcome rubrics in Appendix 2.)

Communication

Communications skills involve the ability to clearly express and understand ideas in written, oral and non-verbal forms. Communication includes the practical exchange of information, which can include the ability to listen, comprehend and respond to others, as well as the creative expression of ideas in the visual, written and performing arts. In oral and written communication, students will demonstrate the ability to shape a central thesis, organize an argument, and formally support that argument. Students will be able to understand and interpret creative expression based on knowledge of the forms and principles of various expressive media.

Quantitative and Scientific Reasoning and Literacy

Quantitative reasoning involves the ability to work with numerical data and the higher-order thinking skills required to make and understand mathematical arguments. Scientific literacy involves the acquisition and application of skills and knowledge necessary to understand the nature and content of science, and to evaluate scientific arguments using evidence-based reasoning. Students will be able to understand and develop arguments supported by quantitative evidence, clearly communicate those arguments in a variety of formats (using words, tables, graphs, statistical inference, mathematical equations and functions, etc., as appropriate), and apply mathematical and scientific methods to solve problems from a wide array of contexts and everyday situations.

Reference: <http://www.aacu.org/value/rubrics/pdf/QuantitativeLiteracy.pdf>.

Information Literacy and Technology

Information Literacy and Technology involves the ability to locate, select, use and evaluate information obtained from appropriate electronic and/or printed resources, including a critical analysis of the information and the credibility of the sources of information. It also involves the ability to use technology to research, organize, present and/or communicate information in meaningful ways. Additionally, Information Literacy and Technology includes skills such as the ability to understand the development of technology and its impact on society, the ability to understand and use existing technologies and information to address real-world issues, and the ability to recognize emerging technological trends and their possible impact on the future.

Critical and Creative Thinking

Critical Thinking is the intellectually disciplined process of assessing and evaluating ideas and forms. It involves clarifying questions, reflecting upon meaning, comparing multiple viewpoints, and evaluating evidence to make an informed judgment. Creative Thinking involves the production of original ideas, forms or works by making connections, generating alternatives, and elaborating or exploring new applications of accepted practices through innovation and/or invention. Critical and creative thinkers gather information from experience, observation, reasoning, reflection and communication. They

explore and synthesize related ideas, connect them to prior knowledge, and apply them to new contexts.

Global Citizenship and Diversity

Global Citizenship refers to the broad understanding of peoples and cultures in the United States and around the world, and to humankind's place and effects in the world. Global Citizenship includes a respect for the commonalities and differences in peoples, including an understanding of values, beliefs and customs. It places an emphasis on the economic, religious, political, geographic, linguistic, historic, environmental and social aspects that define cultures. It places an emphasis on equality and human rights, an appreciation for diversity, the interconnectedness of societies and cultures, and a commitment to finding solutions to problems that can affect the world.

PROPOSAL 4: General Education Distribution Requirements [Breadth of Knowledge]

Washburn's General Education program is designed to provide all students with a breadth of knowledge in the traditional areas of **1.)** Arts and Humanities; **2.)** Natural Sciences, Mathematics and Statistics; and **3.)** Social Sciences. In this report these areas will be referred to as the Liberal Studies Distribution Requirement. It is recommended that the total number of credit hours students are required to complete in each Liberal Studies Distribution category be determined by the individual student's specific degree programs (BA, BS, BFA, etc.) and majors, although establishing some minimum number of credit hours for all students may also be appropriate. It is recommended that a Distribution course that is also designated a Learning Outcome course can be used to fulfill both Learning Outcome and Distribution credit hour requirements. It is further recommended that all courses currently approved as General Education courses at Washburn University remain valid options for satisfying one of the 5 Learning Outcomes as well as the Liberal Studies Distribution requirements.

SECTION 2: PROPOSALS FOR ADDITIONAL CAMPUS-WIDE CONVERSATION

PROPOSAL 5: Courses Satisfying Learning Outcomes

It is recommended that courses be designated as satisfying a Learning Outcome by virtue of instructors **1.)** including the new Learning Outcome relevant to their course in their syllabus; **2.)** clearly indicating which of their course-specific learning objectives will be used to measure that Learning Outcome; **3.)** providing a brief description of their plan for learning assessment; and **4.)** following up and participating in learning assessment activities as required by the campus. It is further recommended that instructors engage in a collaborative process with their individual departments to reach a consensus regarding the appropriate Learning Outcome for each course offered by the discipline. The role of the standing General Education committee in this process would be to assist faculty in preparing their syllabus descriptions and learning assessment plans. (Sample assessment rubrics for each Learning Outcome are shown as Appendix 2).

PROPOSAL 6: Using Major Courses to Satisfy General Education Learning Outcomes

It is acknowledged that courses within a student's major may help students achieve a Learning Outcome. For that reason, it is recommended that major courses be eligible for fulfilling the General Education Learning Outcome requirements. While the exact number of credit hours within the major that can be used to fulfill each Learning Outcome requirement should be determined by individual disciplines, it is recommended that a maximum of 3 credit hours from a student's major coursework can be used to satisfy any particular Learning Outcome. This policy encourages fulfillment of the Learning Outcomes across the student's entire educational experience, and increases students' choices regarding

the range of Liberal Studies Distribution courses they may use to fulfill their General Education breadth of knowledge requirements (see Proposal 4). It is important to note that using major courses to fulfill Learning Outcomes does not reduce the total number of Liberal Studies Distribution credit hours students are required to take.

PROPOSAL 7: University Requirements

It is recommended that Washburn University eliminate the term "University Requirements" and substitute the term "Core Courses" instead. This term is **1.)** broader in scope and **2.)** used in a similar manner at many other universities, and **3.)** allows for greater flexibility in the Washburn curriculum. The definition of a Core Course — a course taken by all, or virtually all students that emphasizes a set of skills that exemplify a set of basic University values — can then be directly linked to a subset of approved Learning Outcomes. Recommendations for University Requirements EN 101 and MA 110 are described in Proposal 8.

It is also recommended that the PE 198 requirement be eliminated.

It is further recommended that all students be required to take a second composition course as specified by their major requirements. It is expected that EN 300 will remain the norm for many majors, although some majors may decide that their students are provided with a better learning experience by taking two freshman year composition courses sequentially. Consistent with a Task Force principle enunciated above, we believe the decision regarding the second composition course is best left to the individual majors.

PROPOSAL 8: Core Courses

Results from a survey and a Faculty Development Workshop conducted in Fall 2009 revealed strong support for a hybrid General Education program that consists of a Distribution Model with a small number of highly-focused Core Courses. This section describes the Task Force's recommendations for the Core Course component of the General Education model being proposed. Although the Task Force is not a curriculum committee, members felt it was appropriate to provide some specific suggestions that might serve as a starting point for additional discussion of this issue.

While the final Core Courses remain to be determined, it is recommended that Washburn begin by offering 3 Core Courses, one each focused on the Communication, Quantitative and Scientific Reasoning and Literacy, and Information Literacy and Technology Learning Outcomes. It is recommended that the current University Requirements EN 101 and MA 110 (or higher) be reclassified as Core Courses. It is further recommended that a course currently taught primarily online as a 1-unit course, IS 170, be expanded to a 3-unit version with discipline-specific tracks for CAS, Business, Nursing, etc. Suggested topics include best practices for conducting library and other research, the major research paper styles (MLA, APA), how to recognize and avoid plagiarism, etc. The creation of such a course also presents the possibility for interesting synergies with Freshman Experience-type courses associated with best practices for increasing student retention rates. It is recommended that advisors encourage students to complete the Core Courses in the first 30 hours of coursework. Core Courses are primarily focused on achieving one particular Learning Outcome. Core Courses may be used to fulfill a Learning Outcome requirement and may also be used to fulfill Distribution requirements, as determined by a student's major. Students should be required to pass Core General Education Courses with a grade of C or better.

PROPOSAL 9: Transferring General Education Credit Hours From Other Institutions

In the interest of improving transfer-friendliness, it is recommended that a course taken at another Higher Learning Commission accredited institution that fulfills a General Education requirement in **1.)** Social Sciences, **2.)** Natural Sciences, Mathematics and Statistics or **3.)** Arts and Humanities at that

institution will fulfill a similar General Education requirement at Washburn University. The course will meet the Liberal Studies Distribution requirement relevant to its discipline. The Learning Outcome requirement the course fulfills (if any) will be determined by the Learning Outcome fulfilled by a similar course at Washburn University. Liberal Studies Distribution transfer decisions would be determined by Admissions if the transfer course fits an existing approved Liberal Studies Distribution grouping. If no similar course at Washburn exists, the advisor will consult a Learning Outcome rubric that maps typical university disciplines to Washburn's approved Learning Outcomes. It is recommended that this rubric be established by the General Education committee in consultation with individual faculty insights regarding the Learning Outcome most appropriate for their General Education course(s).

As specific programs are recommended to require a second composition course as part of their General Education requirements, and some programs will require an upper-division composition course, if a student transfers in two lower-division composition courses, the first course will fulfill the Core Course in Communication, and the second course will count as a Liberal Studies Distribution requirement in Arts and Humanities. This course may or may not also fulfill the second composition course requirement of a particular program, depending on whether the program requires a lower-division or an upper-division course as its second composition course.

NOTE ON THE ADVISING WORKSHEETS (FOLLOWING PAGES)

The following pages present a prototype for a one-page advising worksheet that corresponds with the recommendations proposed in this Report. The Task Force has asked faculty from a variety of disciplines to practice using the worksheet for their specific major and program (with specific examples appearing on the following pages as Appendix 1). Every user had a similar reaction: an initial start-up period of 20-30 minutes was necessary to become familiar with the worksheet. Therefore, before previewing the advising worksheet, realize that it is a tool that requires a bit of new learning to master. (Proper use of the worksheet also requires classifying General Education courses into Learning Outcome categories, an activity that has not yet been completed.) Of course, the worksheet represents one proposal for a tool students and advisors can use to plan a successful General Education experience. Additional proposals for better Advising Worksheet designs are always welcome.

The worksheet would probably work best with a set of logical instructions for students and advisors, something along the lines of **Step 1:** Identify all courses required by your major or degree program. **Step 2:** Identify which General Education Learning Outcomes these courses satisfy (if any), and whether or not these courses are taught in any traditional Liberal Studies discipline. **Step 3:** Enter the course number in the appropriate Learning Objective column and Liberal Studies row, along with the number of credit hours for the course. **Step 4:** Identify all additional Liberal Studies courses you are interested in taking. **Step 5:** Enter these courses in the appropriate column and row. Etc.

Appendix 1A: Sample General Education Advising Worksheet for a BS in Mathematics.

(This example was created to depict General Education options for a student earning a Bachelor's of Science in Mathematics.)

Learning Objectives								
Minimum credit hours per Learning Objective are given at the bottom of the respective column								
	Communication	Quantitative and Scientific Reasoning and Literacy	Information Literacy and Technology	Critical and Creative Thinking	Global Citizenship and Diversity	Liberal Studies Courses not meeting an LO	Total	
Core	EN 101	MA 110 or Higher	IS 170	X	X	X	9	
Liberal Studies Distribution Requirements Minimum credit hours per area are given at the end of the respective row	Arts and Humanities	EN 300			AR 101		9 (9min)	
		CN 150						
	Natural Sciences, Mathematics and Statistics		CH 101					9 (9min)
			AS 101					
			BI 100					
	Social Sciences				PY 100	AN 112		9 (9min)
						SO 100		
	Other Courses			CM 101			3	
	Total	9 (9 minimum)	12 (9 minimum)	6 (6 minimum)	6 (6 minimum)	6 (6 minimum)		39

*No more than 3 credit hours within a Learning Objective can be a major course.

*No more than 6 credit hours within a Learning Objective can come from any one discipline (EN, MA, etc.).

*No more than 6 credit hours for each Liberal Studies Distribution Requirement can come from any one discipline.

Appendix 1B: Sample General Education Advising Worksheet for a Bachelor's in Business.

(This example was created to depict General Education options for a student earning a Bachelor's in Business.)

		Learning Objectives						
		Number of Credit Hours Down Each Learning Objective Column Must Total at Least 9						
		Communication	Quantitative Reasoning and Scientific Literacy	Technology and Information Literacy	Critical and Creative Thinking	Global Citizenship and Diversity	Liberal Studies Courses not meeting an LO	Total
	Core	EN 101	MA141*	LI 100	X	X	X	9
Liberal Studies Distribution Requirements Number of Credit Hours Across Each Liberal Studies Row Must Total at Least 12	Arts and Humanities	EN300		MM200	AR103			12
		CN150*						
	Natural Sciences, Mathematics and Statistics		MA116			BI150		12
			MA140*					
			BI100					
	Social Sciences					HI101	AN112*	12
							SO100*	
							GG102	
		Other Courses			BU250			3
		Total	9	12	9	9	9	48

No more than 3 credit hours within a Learning Objective can be a major course.

*School of Business correlates

No more than 6 credit hours within a Learning Objective can come from any one discipline (EN, MA, etc.).

No more than 6 credit hours for each Liberal Studies Distribution Requirement can come from any one discipline.

Appendix 1C: Sample General Education Advising Worksheet for a Bachelor's in Psychology

(This example was created to depict General Education options for a student earning a Bachelor's in Psychology.)

		Learning Objectives						
		Minimum credit hours per Learning Objective are given at the bottom of the respective column						
		Communication	Quantitative and Scientific Reasoning and Literacy	Information Literacy and Technology	Critical and Creative Thinking	Global Citizenship and Diversity	Liberal Studies Courses not meeting an LO	Total
Core		EN 101	MA 110 or Higher	IS 170	PH 104 (3 cr)	AN 112 (3 cr)	SO 100 (3 cr)	9
Liberal Studies Distribution Requirements Minimum credit hours per area are given at the end of the respective row	Arts and Humanities	EN 300 (3 cr)		MM 100 (3 cr)	PH 104 (3 cr)			12
		CN 150 (3 cr)						
	Natural Sciences, Mathematics and Statistics		BI 100 (3 cr)	CM 101 (3 cr)				12
			CH 203 (3 cr)					
			MA 141					
	Social Sciences				PY 100 (3 cr)	AN 112 (3 cr)		15
					HI 100 (3 cr)	SO 100 (3 cr)		
						SO 336 (3 cr)		
	Other Courses							
	Total		9	12	9	9	9	48

*No more than 3 credit hours within a Learning Objective can be a major course.

*No more than 6 credit hours within a Learning Objective can come from any one discipline (EN, MA, etc.).

*No more than 6 credit hours for each Liberal Studies Distribution Requirement can come from any one discipline.

APPENDIX 2: PROPOSED GENERAL EDUCATION LEARNING ASSESSMENT RUBRICS

Communication

Communications skills involve the ability to clearly express and understand ideas in written, oral and non-verbal forms. Communication includes the practical exchange of information, which can include the ability to listen, comprehend and respond to others, as well as the creative expression of ideas in the visual, written and performing arts. In oral and written communication, students will demonstrate the ability to shape a central thesis, organize an argument, and formally support that argument. Students will be able to understand and interpret creative expression based on knowledge of the forms and principles of various expressive media.

Level	Descriptors
4 - Advanced	The candidate demonstrates an excellent ability to communicate with clarity, follow basic rules of grammar and usage, speak and /or write in coherent and logical ways and in various forms to different audiences and situations. The candidate can communicate clearly and effectively with excellent organization, style, tone, content and use of primary sources of information. In oral and written communication, candidates demonstrate an excellent ability to shape a central thesis, organize an argument, and formally support that argument. Ideas, concepts or arguments are presented clearly, concisely and professionally and in various expressive mediums.
3 - Target	The candidate demonstrates a satisfactory ability to communicate with clarity, follow basic rules of grammar and usage, speak and /or write in coherent and logical ways and in various forms to different audiences and situations. The candidate can communicate effectively with satisfactory organization, style, tone, content and use of primary sources of information. In oral and written communication, candidates demonstrate an ability to shape a central thesis, organize an argument, and formally support that argument. Ideas, concepts or arguments are presented clearly and professionally and in various expressive mediums.
2 - Developing	The candidate demonstrates a limited ability to communicate with clarity, follow basic rules of grammar and usage, speak and /or write in coherent and logical ways and in various forms to different audiences and situations. The candidate can communicate in a limited fashion with organization, style, tone, content and use of primary sources of information. In oral and written communication, candidates demonstrate a limited ability to shape a central thesis, organize an argument, and formally support that argument. Ideas, concepts or arguments are presented.
1 - Unacceptable	The candidate does not demonstrate an ability to communicate with clarity, follow basic rules of grammar and usage, speak and /or write in coherent and logical ways and in various forms to different audiences and situations. The candidate does not communicate effectively with satisfactory organization, style, tone, content and use of primary sources of information. In oral and written communication, candidates do not

	demonstrate an ability to shape a central thesis, organize an argument, or formally support that argument. Ideas, concepts or arguments are not presented clearly and professionally.
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Quantitative and Scientific Reasoning and Literacy

Quantitative reasoning involves the ability to work with numerical data and the higher-order thinking skills required to make and understand mathematical arguments. Scientific literacy involves the acquisition and application of skills and knowledge necessary to understand the nature and content of science, and to evaluate scientific arguments using evidence-based reasoning. Students will be able to understand and develop arguments supported by quantitative evidence, clearly communicate those arguments in a variety of formats (using words, tables, graphs, statistical inference, mathematical equations and functions, etc., as appropriate), and apply mathematical and scientific methods to solve problems from a wide array of contexts and everyday situations.

Level	Descriptors
4 - Advanced	The candidate demonstrates an excellent ability to understand and apply basic mathematical and scientific functions to professional and personal problems. They are able to develop a hypothesis, construct experiments to test the hypothesis, interpret and communicate the results. Mathematical and scientific symbols and concepts are used appropriately and are often elaborated upon. Language use is precise and accurate and appropriate to the field of study. There is a high level of ability to understand and create sophisticated arguments supported by quantitative evidence, clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations and functions, etc. as appropriate), and apply mathematical and scientific methods to solve problems from a wide array of authentic contexts and everyday life situations.
3 - Target	The candidate demonstrates a satisfactory ability to understand and apply basic mathematical and scientific functions to professional and personal problems. They are able to develop a hypothesis, construct experiments to test the hypothesis, interpret and communicate the results. Mathematical and scientific symbols and concepts are used appropriately. Language use is accurate and appropriate to the field of study. There is an ability to understand and create arguments supported by quantitative evidence, clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations and functions, etc. as appropriate), and apply mathematical and scientific methods to solve problems from a wide array of authentic contexts and everyday life situations.
2 - Developing	The candidate demonstrates a limited ability to understand and apply basic mathematical and scientific functions to professional and personal problems. They are able to develop a hypothesis, construct experiments to test the hypothesis, interpret and communicate the results with support or assistance. Candidates show some basic understanding of the

	language use appropriate to the field of study. There is a limited ability to understand and create arguments supported by quantitative evidence, clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations and functions, etc. as appropriate), and apply mathematical and scientific methods to solve problems from a wide array of authentic contexts and everyday life situations.
1 - Unacceptable	The candidate does not demonstrate an ability to understand and apply basic mathematical and scientific functions to professional and personal problems. They are not able to develop a hypothesis, construct experiments to test the hypothesis, interpret and/or communicate the results. Candidates do not show an understanding of the language use appropriate to the field of study. There is no evidence of the ability to understand and create arguments supported by quantitative evidence, clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations and functions, etc. as appropriate), or to apply mathematical and scientific methods to solve problems from a wide array of authentic contexts and everyday life situations.

Information Literacy and Technology

Information Literacy and Technology involves the ability to locate, select, use and evaluate information obtained from appropriate electronic and/or printed resources, including a critical analysis of the information and the credibility of the sources of information. It also involves the ability to use technology to research, organize, present and/or communicate information in meaningful ways. Additionally, Information Literacy and Technology includes skills such as the ability of to understand the development of technology and its impact on society, the ability to understand and use existing technologies and information to address real-world issues, and the ability to recognize emerging technological trends and their possible impact on the future.

Level	Descriptors
4 - Advanced	The candidate demonstrates a high level of understanding of how to use information and technology to manage and communicate information. They are able to evaluate the quality of information for bias, authenticity and completeness. They can articulate the role of technology and its impact on human behavior. They can use a wide variety of emerging and existing technologies (word processing, spreadsheets, data bases, search engines, electronic databases, presentation, etc.) and apply these to personal and professional problems. Candidates show an advanced ability to use technology as a tool to research, organize, evaluate and communicate information.
3 - Target	The candidate demonstrates a satisfactory understanding of how to use information and technology to manage and communicate information. They are able to evaluate the quality of information for bias, authenticity and completeness. They can articulate the role of technology and its impact

	on human behavior in a limited way. They can use a wide variety of emerging and existing technologies (word processing, spreadsheets, data bases, search engines, electronic databases, presentation, etc.) and apply these to personal and professional problems. Candidates show a satisfactory ability to use technology as a tool to research, organize, evaluate and communicate information.
2 - Developing	The candidate demonstrates a limited understanding of how to use information and technology to manage and communicate information. They are able to use information but do not evaluate it for bias, authenticity and completeness. They can articulate the role of technology and its impact on human behavior. They can use a wide variety of emerging and existing technologies (word processing, spreadsheets, data bases, search engines, electronic databases, presentation, etc.) and apply these to personal and professional problems. Candidates are somewhat aware of how to use technology as a tool to research, organize, evaluate and communicate information.
1 - Unacceptable	The candidate does not demonstrate an understanding of how to use information and technology to manage and communicate information. They are not able to evaluate the quality of information for bias, authenticity and completeness. They cannot articulate the role of technology and its impact on human behavior. They can use a limited variety of emerging and existing technologies (word processing, spreadsheets, data bases, search engines, electronic databases, presentation, etc.) and apply these to personal and professional problems. Candidates show only a superficial ability to use technology as a tool to research, organize, evaluate and communicate information.

Critical and Creative Thinking

Critical Thinking is the intellectually disciplined process of assessing and evaluating ideas and forms. It involves clarifying questions, reflecting upon meaning, comparing multiple viewpoints, and evaluating evidence to make an informed judgment. Creative Thinking involves the production of original ideas, forms or works by making connections, generating alternatives, and elaborating or exploring new applications of accepted practices through innovation and/or invention. Critical and creative thinkers gather information from experience, observation, reasoning, reflection and communication. They explore and synthesize related ideas, connect them to prior knowledge, and apply them to new contexts.

Level	Descriptors
4 - Advanced	The candidate displays a high level of creativity and original thought and/or the ability to elaborate upon their ideas. They are able to identify and evaluate the quality of information and/or evidence and use this to solve everyday professional and personal problems. They show an excellent understanding of historical, artistic, social, economic, political, and /or philosophical trends and issues and use this information to make informed decisions. They make use of reason, logic, and reflection as a

	part of their decision making processes. Candidates can clearly identify the main issue or problem, generate possible alternatives and make connections or comparisons to other areas. They are able to explore and synthesize ideas and apply these ideas to new contexts.
3 - Target	The candidate displays some creativity and original thought and/or the ability to elaborate upon their ideas. They are able to identify and evaluate the quality of information and/or evidence and use this to solve everyday professional and personal problems. They show a satisfactory understanding of historical, artistic, social, economic, political, and /or philosophical trends and issues and use this information to make informed decisions. They make use of reason, logic, and reflection as a part of their decision making processes. Candidates can identify the main issue or problem, generate possible alternatives and make connections or comparisons to other areas. They are able to explore and synthesize information.
2 - Developing	The candidate displays a limited ability to create new ideas or the ability to elaborate upon their ideas. They are able to identify information and/or evidence and use this to solve everyday professional and personal problems, but do not evaluate this material. They show a limited understanding of historical, artistic, social, economic, political, or philosophical trends and issues. Candidates can identify with support the main issue or problem, generate possible alternatives and make connections or comparisons to other areas. They are able to explore and synthesize information in a limited way.
1 - Unacceptable	The candidate does not demonstrate an ability to create new ideas or the ability to elaborate upon the ideas of others. They are not able to identify information and/or evidence and use this to solve everyday professional and personal problems, and do not evaluate this material. They show a very limited understanding of historical, artistic, social, economic, political, or philosophical trends and issues. Candidates do not identify a main issue or problem, generate possible alternatives or make connections or comparisons to other areas. They are not able to explore and synthesize information in a meaningful way.

Global Citizenship and Diversity

Global Citizenship refers to the broad understanding of peoples and cultures in the United States and around the world, and to humankind's place and effects in the world. Global Citizenship includes a respect for the commonalities and differences in peoples, including an understanding of values, beliefs and customs. It places an emphasis on the economic, religious, political, geographic, linguistic, historic, environmental and social aspects that define cultures. It places an emphasis on equality and human rights, an appreciation for diversity, the interconnectedness of societies and cultures, and a commitment to finding solutions to problems that can affect the world.

Level	Descriptors
4 - Advanced	Candidates demonstrate a thorough understanding of different cultures and peoples including economic, religious, social, political, historic, linguistic, environmental, and geographic aspects of those cultures and a high level of awareness of global issues. There is an advanced level of understanding of the similarities between peoples from various cultural backgrounds and an acceptance of differences between them. The candidate is sensitive to issues of racism and prejudice. The candidate communicates, interacts, and works positively with individuals from other cultural groups and values opportunities to learn from diverse perspectives.
3 - Target	Candidates demonstrate a satisfactory understanding of different cultures and peoples including economic, religious, social, political, historic, linguistic, environmental, and/or geographic aspects of those cultures and a high level of awareness of global issues. The candidate is knowledgeable of the similarities between peoples from various cultural backgrounds and an acceptance of differences between them. The candidate is sensitive to issues of racism and prejudice. The candidate communicates, interacts, and works positively with individuals from other cultural groups and values opportunities to learn from diverse perspectives.
2 - Developing	Candidates demonstrate a limited understanding of different cultures and peoples including economic, religious, social, political, historic, linguistic, environmental, or geographic aspects of those cultures and a limited awareness of global issues. The candidate has some knowledge of the similarities between peoples from various cultural backgrounds and an acceptance of differences between them. The candidate show some understanding of issues related to racism and prejudice. The candidate communicates, interacts, and works positively with individuals from other cultural groups and values opportunities to learn from diverse perspectives.
1 - Unacceptable	Candidates do not demonstrate an understanding of different cultures and peoples including economic, religious, social, political, historic, linguistic, environmental, or geographic aspects of those cultures. The candidate does not demonstrate an awareness or understanding of global issues. The candidate shows a superficial understanding of the similarities between peoples from various cultural backgrounds and an acceptance of differences between them. The candidate is sensitive to issues of racism and prejudice. The candidate displays a limited ability to communicate, interact, and work positively with individuals from other cultural groups and values opportunities to learn from diverse perspectives.

APPENDIX 3: PROPOSED GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATES DEGREES

The minimum requirements for all associate degrees include the following:

- a. Students must successfully complete one approved course (or a minimum of 3 credit hours) for each of the five General Education Learning Outcomes (LOs).
- b. Courses used to satisfy each of the five Learning Outcomes may not count towards meeting the Distribution requirements, with the exception of IS170, which may also be counted as a Distribution requirement.
- c. Students must complete 9 hours of Distribution coursework in two of the three areas of Humanities, Social Sciences, and Natural Sciences, Mathematics and Statistics. (IS170 meets a Distribution requirement as noted also in **b.**)
- d. No course in a student's Associate Degree major may count towards the Distribution requirement.

Rationale: This proposal requires a minimum of 21 credit hours of General Education for an Associate Degree. Most Associate Degrees will have requirements in the sciences or social sciences that will exceed the minimum. This allows some flexibility across Associate Degrees within the SAS and CAS.

With respect to transfer students, this option allows students with Associate Degrees or those working towards Associate Degrees from community colleges and technical colleges to transfer more easily. Many accredited technical colleges and community colleges will have Distribution requirements that are more heavily focused on one Distribution area over that of the others.